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# THE JOURNAL OF FINANCE

Volume III JUNE, 1948 Number Two

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## THE JOURNAL OF FINANCE

Published by the American Finance Association

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Correspondence relating to membership in the American Finance Association and other business matters should be addressed to the Secretary-Treasurer, Edward E. Edwards, School of Business, Indiana University, Bloomington, Ind.

Communications relating to THE JOURNAL should be addressed to the Editor, Marshall D. Ketchum, School of Business, University of Chicago, Chicago 37, Illinois.


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# SCHACHT'S REGULATION OF MONEY AND THE CAPITAL MARKETS

*By* ARTHUR SCHWEITZER
*Associate Professor of Economics*
*Indiana University*

Government investments have been accompanied by a relatively flexible supply of money and by a fixed but low rate of interest. This experience has given rise to a new theory which is in some respect the reverse of the traditional loanable funds theory. The new theory tries to explain the fixed rate of interest. The banking system, especially the governmentally-controlled central bank, sets one rate of interest. The central bank is guided in its decisions by the current business situation, especially by its desire to obtain or support a high level of employment. This fixed bank rate is supported by variations in the supply of money. Through appropriate reserve or open market policies, private banks are forced to follow the rate of the central bank. This very elastic supply of money can be varied between two theoretical limits. These are determined by the points at which the banking system fails either to curtail a downward or stop an upward rising movement of the level of income. Within these limits, the quantity of money becomes the variable to support the once fixed rate of interest.[1]

It follows that fixing the rate in this manner does not require regulation of money and capital markets. Compliance of private banks as well as flexibility of demand and supply for funds is obtained through variations in supply of money. Decisions of the central banks are as market forces to which private banks must adjust themselves. A competitive market for funds is thus retained. As a supplier of money, the central bank competes with other suppliers in the market. Private banks are forced towards the rate of the central bank. The governmentally fixed rate is thus the competitive rate in the markets, around which the rates of private banks oscillate. Governmental price fixing is thus said to have the effect of insuring a competitive market and a competitive price which tends to reduce the monopolistic positions of private banks.

This interesting theory, primarily derived from American experience, does not apply to the monetary policies of Schacht in the first phase of the Nazi's regime. To be sure, the Reichsbank increased the supply of money and reduced the rates of interest. But increase in the supply of money came prior to lowering and

[1]Joe S. Bain, *Pricing, Distribution and Employment*, New York, 1948, Chapter 12.

fixing the rate of interest. The time sequence of the two factors was thus the reverse of the one assumed in the theory. The prime function of increased supply of money was first to finance rearmament and secondly to reduce and fix the rates of interest. This reveals the implicit assumption of the theory: it is only when the central bank limits itself to setting and defending its rate of interest, that the central bank can vary its supply of money freely. Only then can a central bank provide a perfectly elastic supply of funds. Under conditions of extensive government investment, or an obligation to support the price of government bonds, supply of money becomes less than elastic, for the central bank may almost lose its power to curtail substantially the supply of money.[2]

Moreover, a fixed rate of interest and a variable supply of money do not necessarily operate within the framework of free money and capital markets. In order to carry through its program of financing public investment, the government may impose a system of market regulation. Three reasons induced Schacht to continue the system of market regulation that he inherited from the preceding banking crisis and to transform it into instruments of financing rearmament. First, the process of hoarding initiated in the previous credit crisis had not yet come to an end. In order to avoid hoarding of some of the new money the restrictions upon disposal of deposits and embargoes upon issues of securities were continued. They became important devices to restrict private demand for loanable funds during the financing of rearmament. Second, the private banking system was full of frozen accounts. The danger existed that a mere increase in money supply would exhaust itself in a process of dishoarding. The central bank thus obtained through the new banking law "full power to supervise private banks, so as to direct the process of unfreezing assets, prevent excess liquidity in the banks, and direct the newly available funds to the financing of rearmament. Third, the government was not so much interested in a general increase of money and of available funds. Rather is was determined to finance rearmament. This involved a check upon the flow of the new funds. They should not be dissipated for less essential investments. Nor should the backflow of the supplied money lead to a general investment in civilian industries. The funds returning to the banks should be reserved for the purchase of long-term bonds of the government.

[2]Mr. Bain emphasizes the important "inflexible element" which a large government debt introduces in the pattern of income distribution. However, the same "inflexible element" prevails in cases of a "monetized debt" or of extensive government investment through the supply of money, except for counter-cyclical public investments.

Regulation of money and capital markets became thus an inherent part of financing rearmament. It is the form and nature of this market regulation, and not the supply of money or related issues, that forms the topic of this study. In analyzing regulation, we obviously cannot follow the new theory of the fixed bank rate of interest. Instead, we will see that the central bank acted as either a monopolist or quasi-monopolist in regulating money and capital markets.

The central bank was the regulator of these markets. Two laws of October, 1933, and December, 1934, gave the Reichsbank extensive power over all private credit institutions.[3] On the whole, four distinct policies were pursued: to regulate the money market in order to issue and direct the flow, first, of employment bills, later, of special bills; to reserve the capital market for the sale of government bonds; to manipulate demand and supply of old bonds and shares in the security markets; to lower and fix all rates of interest on a relatively low level.

### *Regulation of the Money Market*

Up to 1938, the money market was dominated by so-called special bills. These bills originated with the placement of armament orders. Producers drew the special bills against procurement agencies in payment of armament orders. These bills were accepted by a dummy organization of the government, called *Metallurgische Forschungs-Gesellschaft g.m.f.H.* (Mefo.). Special bills ran for six months but could be renewed for an unlimited time. Accepted bills came to private banks and either led to the issue of currency, 33 per cent from February, 1933 to February, 1938, or to the creation of demand deposits by private banks. The supply of money was thus increased *after* the bills had functioned as means of paying armament orders.

The central bank facilitated the acceptance of these bills through two devices. It made the bills eligible for rediscount and modified the liquidity requirements of private banks. Savings banks were obligated to invest 30 per cent of their deposits in short-term notes. Soon commercial banks were subjected to the same requirements. The special bills, presented to banks by armament contractors, were in the last analysis absorbed by the central bank. A total of 12 billion marks of special bills had been issued when the policy

[3]Marie Dessauer, "The German Bank Act of 1934," *Review of Economic Studies*, Vol. II (1934-35), pp. 214-24.

was discontinued on April 1, 1938.[4] The result was a flooding of the money market with special bills. In rediscounting special bills, the central bank, in effect, loaned increasing funds to the government without violating the statutory limit of loans to 400 million marks for regular treasury notes.

In financing rearmament through special bills, the central bank obtained a monopolist position in the money market. As a monopolist, the central bank implemented two distinct policies. On the one hand, the supply of special bills was increased rapidly. The central bank had a peculiar objective, unlike the one of private monopolists in commodity markets. Not the restriction but the substantial increase in supply of special bills became the deliberate policy of the central bank. On the other hand, the supply of commercial or financial bills of private concerns or banks was deliberately kept down by the central bank. In fact, the volume of genuinely commercial bills drastically declined. Special government bills dominated the money market.

Shrinkage of privately issued bills began with the withdrawal of funds by foreign creditors in 1929. Yet the rearmament boom did not lead to an increase in the opportunities of commercial banks. Industrial production rose by 120 per cent from 1932 to 1937. Business volume of commercial banks remained unchanged during this period. Short-term credits of commercial banks for business transactions fell from 4.11 billion marks in 1932 to 3.01 billions in 1937. Hence, commercial credit declined during the rearmament boom. Outstanding was the decline in commercial bills. Industrial concerns either repaid their short-term debt and/or financed many of their transactions with their own funds. Commercial banks lost many of their customers. The government thus introduced a new procedure of financing private producers of the armament sector. Payment through special bills replaced ordinary commercial bills. Concerns were thus no longer in need of loans from private banks. The result was a decline in the business volume of bank loans to private concerns.

Instead, banks became liquid again. Industrialists placed their newly earned assets in private banks. The deposits of commercial banks increased from 3.8 billion marks in 1932 to 4.6 billions in 1937. At first, increased liquidity unfroze accounts; repayment of debts, formerly written off, reduced the losses of the past. Gradually, private banks regained their capacity to loan short-term

[4] *Nazi Conspiracy and Aggression*, vol. VII, pp. 491-2; "Anlagevorschriften fuer das Kreditgewerbe," *Deutscher Volkswirt*, November 30, 1934.

funds. However, there were few private callers. Only one market was left to the banks, the special bills of the government.[5] In consequence, the private banks experienced a shift in their opportunities from loans to private concerns to loans to the government. They thereby became, in their own interest, fully dependent upon the policies of the central bank. Moreover, the central bank acted as a monopolist; it controlled the supply of short-term credit instruments, whether they originated from private concerns or from governmental agencies.

Domination of supply was accompanied by a policy of generating demand for special bills. Three kinds of demand have to be distinguished. Immediate or intermedite demand for special bills came primarily from private concerns and banks. Final demand came from the central bank and the treasury. The central bank, acting here as a monopsonist, tried to increase the immediate and keep down the final demand for special bills. The more special bills were bought by private concerns and banks; the longer they were kept, the less the need to finance rearmament either out of taxes or of government bonds.

Immediate demand for special bills was generated by various devices. They were successful because of a declining demand for bank credits and of increased liquidity of industrial concerns. The profit situation improved greatly in producers' goods industries. Increased utilization of facilities reduced unit cost; wage rates remained stable in spite of increased labor productivity. This led to a general rise in the rate of profit. Firms utilized their profits for three purposes: they freed themselves of commercial indebtedness; they formed rapidly increasing special reserves; they invested directly or indirectly—through purchase of other corporations—the increased profits in industrial concerns.

The increasing volume of open and hidden reserves provided the basis for the deliberate creation of an immediate demand for special bills. Four devices were employed by the central bank:

(a) payment of armament orders by special bills—mostly prior to delivery—enabled corporations to finance transactions without recourse to bank credit;

(b) armament contractors were urged not to cash immediately but to retain their special bills, at least until the goods were delivered;

[5]For details on the position of commercial banks see W. Prion, *Das Deutsche Finanzwunder*, Berlin, 1938, Ch. III.

(c) Private banks were directed to report to the banking commissioner all private concerns with substantial deposits. This provided information of funds at hand by private firms. These were pressured to buy either bills or bonds of the government;

(d) A substantial difference between the official rediscount and the bank rate was maintained, so as to induce private concerns to invest funds in governmental papers, which were more remunerative.

These devices were primarily addressed to private concerns. On the whole, generating immediate demand for special bills was successful because of the peculiar dividend and investment policies of private concerns as well as the controls over private banks and the discount policy of the central bank. Private concerns as well as the government discriminated against the shareholders. In the first four years of the regime, corporations distributed less than 50 per cent of the profits that were subject to the corporation tax. Some undistributed dividends were thus available for purchase of special bills. A similar policy prevailed as to private investments. The sum of profits realized generally exceeded the total of private investments. According to the Institute of Business Cycle Research, depreciation and reserve accounts of corporations exceeded their investments by six billion marks from 1933 to 1937.[6] Like American deficit spending in the 30's, public investment for rearmament was not followed by a corresponding or multiple increase in private investments. Instead, the newly created monetary capital was diverted to the treasury through the sale of special bills to concerns and banks.

A similar policy of inducement and pressure was also applied to private banks. Most banks had idle funds on hand because their deposits exceeded private investment opportunities. The relatively high interest for special bills induced many banks to buy these governmental papers. Yet the pressures crystallized here into an extensive system of governmental controls, exercised by the commissioner of credit control. This official had the authority to fix interest rates, commissions, and fees, in agreement with the central bank. He received regular monthly reports on the large debtors and large depositors. Loans of over one million marks could be granted only with his consent.[7] Idle funds had to be invested according to his instruction. In consequence, special bills replaced the

[6] *Ibid.*, pp. 40-43.

[7] Cf. Otto Nathan, *Nazi War Finance and Banking*, New York, 1944,17ff.

bills of private concerns in the portfolios of banks. Commercial banks increased their holdings of special bills by not less than two billion marks from 1933 to 1937. The shift in holdings of bills indicated a change in the functions of commercial banks. Instead of providing credit and participating in riskbearing, private banks were reduced to collectors of private funds which had to be put at the disposal of the government. Banks thus did not actively participate in the financing of rearmament; they were reduced to auxilaries in the policy of public investments.

Nevertheless, immediate demand of private concerns and banks did not fully absorb the increasing volume of special bills. Two measures were introduced to divert the flow of special bills to the central bank for rediscounting. The first was the renewal of bills. Ordinarily, bills were good for six months. The central bank, however, prolonged the period at its discretion. When large blocks of special bills matured, the central bank issued block bills (*Blockwechsel*) to the holding bank. This transformed the short-term bills into intermediate loans. The second measure was very similar: solar bills (*Solarwechsel*) were substituted for special bills. Solar bills was issued by the Gold Discount Bank, a subsidiary of the central bank, and offered to private banks and concerns. The three-month bills carried an interest rate of 3¾-3⅞ per cent. Sales receipts of these bills were utilized to purchase special bills from the central bank.[8] Whether renewal or substitution of special bills, the amount of special bills outstanding was not reduced. These devices merely created an intermediate demand for special bills and thereby postponed the day of maturity, when either the treasury or central bank had to foot the final bill of rearmament finance.

Yet creation and diversion of demand did not obviate the decisive danger to the central bank. An increasing quantity of special bills were presented for rediscounting. From 1933 to 1937, the portfolio of the central bank in special bills rose by three billion marks. As in the case of private banks, special bills constituted the major assets of the central bank. Of a total of 6.46 billion assets in 1937 not less than 6.01 billions comprised special bills.[9] To relieve this situation, the central bank pressured the treasury to increase taxes and cancel an increasing percentage of special bills.

[8]Reichs-Kredit-Gesellschaft, *Economic Conditions of Germany of the Year 1939*, p. 48ff.

[9]One of the directors of the central bank opposed publicly the replacement of commercial by special bills (cf. E. Einsiedeln, "Wechsel—oder Effektenpolitik," *Bank-Archiv*, April 1, 1934). He paid the inevitable price for his insistence upon traditional central banking policies. Schacht removed him from his position in the directorate of the central bank.

The treasury could not satisfy this demand, although tax revenues and customs returns of the central government rose from 6.64 billion marks in 1932-33 to 13.95 billions in 1937-38. The fastly rising rate of taxation could not cope with the even faster increase in rearmament. This left the central bank only one alternative: to convert the special bills into long-term bonds of the government.

*Regulating the Capital Market*

In the first years of the regime the capital market could not absorb new government bonds on account of the preceding credit crisis. Various steps were necessary to obtain full domination of the capital market. Domination aimed at three goals: to reduce drastically the prevailing rate of interest for new issues which had reached the level of 8 per cent; to increase the supply of funds primarily through excluding the issue of private securities; and to reserve the available supply for public investment by the government. Regulation of the capital market was thus concerned with restricting the issue of private securities; channelling all available funds into government bonds; and reducing the long-term rates of interest.

Various devices were employed to exclude the private demand for funds. During 1933-34 conversion of outstanding shares, bonds and mortgages dominated the market. However, conversion was dependent upon a permit of the central bank. Preference was given to the conversion of governmental securities, amounting to almost one billion marks in 1934.[10] Private securities could be converted only if the owners of securities could assure Schacht that no new funds would be required. Similarly, an embargo upon the issue of mortgages, imposed already in 1931, was rigidly enforced. Permissions for exceptions were granted only if the funds were utilized for desirable purposes. The issue of private mortgages fell from 2.42 billions in 1934 to forty-seven millions in 1937.[11] Financing of the rearmament program, beginning in November, 1934, led thus to a drastic reduction of new mortgages.

Moreover, an embargo upon industrial shares and bonds, imposed in 1933, made the issue of such securities dependent upon permission of the Minister of Economics. Issues of shares rose slowly from ninety-one millions in 1933 to three hundred thirty-three millions in 1937. Yet permitted issues had to finance, directly or in-

[10] *Deutscher Volkswirt*, December 21, 1934, p. 548.
[11] *Wirtschaft und Statistik*, 1939, p. 276.

directly, projects of rearmament.[12] Finally, private insurance companies were obliged to obtain the approval of the commissioner for insurance prior to the purchase of industrial securities. The result of these and related actions was a tremendous increase in the sale of government bonds. From 1933 to 1939 the Treasury had sold 15.3 billion marks in government bonds which compares with three billion marks in the years 1924-29 inclusive. That is to say, of the total of available funds, excepting mortgages, about three-fourths were channelled to the Reich Treasury for financing rearmament.

The system of permissions which was under the effective control of a committee of the central bank, formed in May of 1933, operated effectively. The various kinds of permits regulated private demand for funds. That is, the private demand was kept down below the comparative level of the twenties. Newly issued shares and private bonds comprised a total of 5.6 billion marks in the six year period of 1932-38. Although other factors also influenced the volume of private securities, there can be no doubt that governmental restrictions on the issue of new securities reduced drastically the effective private demand for funds on the capital market.

How did the central bank direct available funds into government bonds? In the main, institutions dealing in funds were instructed to buy government bonds. The Credit Act of 1934 had authorized the banking commissioner to determine liquidity requirements and investment policies of the various kinds of banks. The first long-term loans of the government were taken over directly by the savings banks. The social insurance agencies were obliged to raise their purchases of government bonds from 10 per cent to 75 per cent of the annual accruals to the reserves. Private insurance companies had to do the same, under actual pressure. Government bonds were elevated to the status of permanent investments for insurance funds. The result was a decline in the amount of mortgages and an increase of government bonds held by private insurance companies.[13] Also, investment and commercial banks had to report bi-monthly all loans in excess of one million marks; they had to refuse loans of more than ten to fifteen per cent of their capital or obtain prior permission for such loans from the banking commissioner. A bank could only contract for the purchase of industrial securities after the issue itself was approved by the Minister of Economics. Through the regular reports the commissioner

[12] "Die Handhabung der Emmissionssperre," *Deutscher Volkswirt*, May 26, 1936.

[13] "Die Vermögensanlagen der Lebensversicherungsanstalten seit 1933," *Bank Archiv*, September 1, 1938, p. 546.

was able to locate any idle funds and inform the central bank. Idle funds led to a "suggestion" to bank directors to invest their funds in government bonds or subscribe to a portion of a new loan floated on the "open" market.

Diversion of available funds to the Treasury was accompanied by an "investment ban" upon certain industries. Originally, bans were imposed upon members of compulsory cartels in order to avoid expansion, or lay the foundation for a reduction of plant capacity by cartel action. In later years, some consumer goods industries were subjected to investment bans so as to hold down production of consumer goods (e.g. textiles). In consequence, investment bans had a two-fold significance. They either prevented or reduced existing overcapacity of plants, or they kept down the demand for new funds that went into undesired industrial projects. Investment bans were thus utilized for two distinct investment policies. By limiting the degree of plant utilization or by suggesting extensive scrapping of old machines, the government introduced more or less coercive disinvestment of real capital. In granting exceptions to a ban, as by giving prior approval to a project, the government limited and channelled new investments to industries and plants whose expansion the government desired.[14]

Government regulation thus created a peculiar situation in the capital market. Schacht, as minister of economics and president of the central bank, enjoyed the power of a monopsonist. His actions had a two-fold effect upon the demand for funds. The refusal of permission for private issues, investment bans in some industries, and reservation of funds for government bonds, determined effectively the demand for investment funds. Moreover, Schacht allocated the available funds between private and public uses. His first consideration was to determine the quantity of special bills that could be converted into government bonds. His plan for refunding was imposed upon private credit institutions who were obliged to participate in absorbing bonds. If some funds were still available, permits for issue of private securities were granted to concerns with the most important projects. Hence, Schacht was able to reduce drastically total demand, and direct the largest share of available funds to the treasury. The buyer's monopoly of the government undoubtedly scored a remarkable success.

[14]"Energiewirtschaft als neue Hauptgruppe XIII," *Deutscher Volkswirt*, June 8, 1934: "Was ist die Erweiterung der Leistungsfahigkeit von Betrieben im Sinne des Artikel 5 des Zwangskartellgesetzes," *Kartell-Rundschau*, 1935, pp. 515-21.

What happened, however, to the supply of funds? Supply was influenced by three factors: the action of saving by individuals; the accumulation of profits by concerns; institutional savings through banking and insurance companies. It was only institutional saving that came under direct regulation. Premium payments to some social insurance schemes were raised; the actual benefits to the insured declined. There was thus a steep rise in the reserves of social insurance funds which had to be invested in government bonds. Increased premium payments was the only form of quasi-forced savings under Schacht.

Neither the saving by individuals, nor the accumulation of undistributed profits by firms, was directly regulated during the period of economic rearmament. Accumulation of profits was actively supported through specific tax abatements, through dividend ceilings and other devices. Wage stabilization kept wage costs down. Profits rose greatly, especially in rearmament industries. Large and hidden reserves were accumulated. The volume of internal corporate accumulation, based upon official statistics, has been estimated as amounting to 6.4 billion marks from 1933 to 1936.[15] Hence, private capital formation increased rapidly during a period of extensively regulated money and capital markets. For such regulation had detrimental effects only upon profit opportunities and capital formation of credit institutions.

The pet idea in Schacht's speeches at the time was his praise of savers and his glorification of thrift. Said he in his well-known speech at Koenigsberg in August, 1935: "It would really be suicide . . . . . if the government would violate the interests of the thrifty persons. In the final analysis, reemployment must be financed by the saved surpluses of business and labor".[16] At the same time, Schacht castigated publicly intransigent Nazis who despised thrift and clamored for governmentally decreed rates of interest. These attitudes aroused the rage of Schacht. In a counter-attack, Schacht tried to restrain expenditures of, and establish financial control over party organization. In a memorandum to Hitler in 1935, Schacht made four proposals:

1. A commissioner should determine all sources of income which are derived from Reich, State or Party funds or profits of public or party corporations.
2. A commission should investigate how these funds were used

[15]Samuel Lurie, *Private Investment in a Controlled Economy, 1933-39*, New York, 1947, p. 126.
[16]Reprinted in *Nazi Conspiracy and Aggression*, vol. VII, p. 493.

in the past and how they could be utilized for financing rearmament.

3. The same commission should examine the assets of all public and official party organizations and determine to what extent these assets can be utilized to finance rearmament.
4. The Ministry of Finance should be authorized to raise tax revenue, either through new taxes or through higher tax rates.[17]

These proposals were presented by Schacht as an implementation of the principle of investment planning for financing rearmament which, in his words, required "universal and strict centralization of the entire financial and economic policy."

Schacht failed to get himself appointed as financial controller of the party. However, he was successful in three other respects. The party officially recognized the need for intensive capital formation and even Hitler praised savers in his speeches. Schacht was able to exercise financial control over all state organizations, which supervision also applied to the resettlement programs of the ministry of agriculture. Financial control over all party organizations was imposed by the ruling clique. Controller became the treasurer Schwarz of the party.[18] The authority to increase the supply of funds and finance rearmament was thus used by Schacht politically: he effectively suppressed all of the romantic programs of intransigent Nazis which aimed at a reorganization of society. Incentives for firms to accumulate profits were thus accompanied by restrictions upon state and party expenditures. No wonder that Schacht became the best hated man among the Nazis.

### *Fixing Rates of Interest*

The relative freedom of private savings from governmental regulation raises an important question: How was it possible to lower successively the various rates of interest? How was Schacht able to lower the rates in the face of an intense scarcity of monetary capital? Interest rates fell throughout the armament period. The yield of long-term government bonds declined from 7 per cent in 1933 to 4.5 per cent in 1937. The effective rate of interest for eleven billion government bonds, issued from 1935 to 1938, was at first 4.68 per cent and later 4.60 per cent. The other long-term

[17] *Ibid*, vol. III, p. 870.

[18] *Ibid*, vol. VII, p. 92 and vol. IV, p. 226. For the fate of the Nazi programs on resettlement, land use, and residential construction, which were financially constricted by Schacht, see Arthur Schweitzer, "Depression and War: Nazi Phase," *Political Science Quarterly*, September, 1947.

rates fell correspondingly. The private discount rate was reduced from 3.88 per cent in 1933 to 2.91 per cent in 1937. The rate for call money fell from 5.11 per cent in 1933 to 2.93 per cent in 1937. The only exception to the general decline was the rediscount rate of the central bank which was deliberately kept at 4 per cent.

There was an interesting history to the unchanging rediscount rate of 4 per cent. This official rate was kept high in order to discourage private banks from rediscounting large volumes of special bills with the central bank. However, the much lower private discount rate had a depressing effect upon profit opportunities of private banks. To satisfy the demand of bankers for profitable investments, the central bank issued the solar bills through the Gold Discount Bank. Since those bills carried a rate of 3⅞ per cent, private banks could thus invest their funds in solar bills and thereby escape the undesirable consequences of low private and high official discount rates.

Obviously, interest rates were not determined by market forces, in spite of the relative freedom of private savings. Interest rates were deliberately reduced in three ways. The government: (a) excluded private demands for funds and as a monopsonist lowered the prevailing rates; (b) the government either instructed or negotiated with banks a reduction of the rates; (c) some rates were cut by governmental decree. It was in the case of mortgages only, with the reluctant sanction of Schacht, that the government decreed outright reduction of mortgage rates by court action. All other rates were either lowered by demand manipulation or involuntary agreements with credit institutions.

What was the relationship of monopsonistic manipulation of, and secret agreements on, interest rates. Briefly, manipulation established the condition that made involuntary agreements possible and effective.

In the regulated money and capital markets, demand and supply did not behave in the familiar pattern of counteracting forces. Supply became mainly independent, or ceased to be a function, of the rate of interest. Reducing rates of interest did not lead to a decline in the supply of funds. On the contrary, savings rose from 0.9 billion marks in 1933 to 7.11 billion marks in 1938 leading to a total of private and institutional savings of 19.35 billion marks for the period of six years.[19] In the same period, the long-term rate fell from 7 per cent to 4.5 per cent. Supply of funds rose in the face of declining compensation! Obviously, in saving funds, individuals

[19]Lurie, *op. cit.*, p. 80.

and entrepreneurs were not guided by a desire to obtain maximum returns through saving. Instead, they saved because of the rise of national income. Saving was a function of national income as well as saving and consumption habits of the people. National income rose rapidly; so did the propensity to save. The experience in the previous depression had shown many how important the disposal of saved funds was for economic survival. Total consumption rose but not at the rate of national income. Quite naturally, the result was the marked rise in total savings. Supply of funds thus behaved according to the desire of the government. Savings increased on account of economic rearmament which was in part financed through an increase in the money supply. Direct regulation of the act of saving was thus not necessary. Only if supply of funds would have been guided by the desire to maximize interest income, would Schacht have been faced with the choice of accepting either higher interest rates or of imposing a policy of forced saving.

Demand for funds did not behave according to the wishes of the government. The urge for funds was tremendous. This was especially true in the field of financing real estate and residential construction. Mortgage and savings banks were in arms over the strict enforcement of the embargo against the sale of bonds. In consequence of the embargo upon new shares and bonds, actual demand was not allowed to exert its influence upon the supply of funds. A distinction was introduced between accepted and excluded demand. The latter could not become effective because it was not admitted to the capital market. Accepted private demand was deliberately kept far below the level of total supply. The result was a general tendency towards monetary liquidity, in face of a large volume of excluded demand. Excess supply over accepted demand apparently was a market condition that forced interest rates down. Schacht, instead of admitting his control over the market, pointed towards this apparent liquidity as *the* cause for the falling rates of interest.

Actually, excess of supply over demand never was effective over a significant period of time. Whenever some funds had accumulated, Schacht issued another series of government bonds. This public demand for monetary capital more than absorbed the available funds. It was thus government action, not the effect of market forces, that equalized total effective demand with total supply of funds. However, public demand was not permitted to exert an influence upon interest rates of bonds. Credit institutions were ordered to buy their share of bonds almost at face value and at the

governmentally fixed interest rate. Hence, available funds were put at the disposal of the treasury without an attempt of the government to use higher interest rates as an incentive to raise funds for rearmament.

The rate of interest was deliberately removed as an important force in the decisions of entrepreneurs. In two fields only did rates retain some influence. Industrial concerns repaid their loans to banks because the contractual rate of past loans exceeded the current rate of banks. In repaying debt, industrialists increased the supply of funds which came under governmental control. In investing undistributed profits, concerns abstained from calling upon banks and thus supported the government's policy of keeping down private demand for funds. In translating undistributed profits —which were not taxed by the government—into long-term capital, concerns became independent of the prevailing rate of interest. Two of the largest concerns, for instance, experienced a drop of their interest charges from 3.23 per cent in 1932 to 0.40 per cent of sales volume in 1937.[20] Hence, interest payments ceased to be a significant element of cost, especially in armament concerns. Lowering of the prevailing rates thus benefited primarily the government's program of financing rearmament.

In the field of residential construction, however, direct investments rose from 600 millions in 1933 to 960 millions in 1936.[21] An increasing volume of loans was here accompanied by a rising rate of interest. This competition reduced the business of mortgage and savings banks; its directors protested strongly against their exclusion from the capital market. Yet Schacht did not suppress direct investment in residential construction directly, although this form of financing constituted a loophole in his system of regulating demand and interest rates. Probably, the amount of funds involved was too small; the problem of how to control direct loans too involved. When full employment was reached in construction, materials and laborers were directly allocated to accepted projects. Permits for building of houses were increasingly refused. Direct investment were thus reduced through restrictions in the supply of factors of production. The loophole in the regulated capital market was closed through extending regulation to the labor and commodity markets. This occurred at the end of Schacht's reign. The new controls were no longer in keeping with the principles underlying the policy of economic rearmament. They indicated the choice

[20]Institute fuer Konjunkturforschung, *Wochenbericht*, 1938, p. 351.
[21]H. Kruschwitz, "Die deutsche Wohnungswirtschaft seit 1933," *Jahrbuecher fuer Nationaloekonomie und Statistik*, 1937, v. 146.

that had to be faced by Schacht as well as the Nazis in the summer of 1936: either restrict the volume of rearmament orders or replace the policy of economic rearmament by one of a war economy in time of peace.

In retrospect, regulation of the capital and money markets—apart from the evasion through direct investment in construction—was a success. Supply of funds rose without direct government control. Reduction of private demand for funds was coupled with incentives for reinvesting undistributed profits. This reserved monetary capital in the markets for the government, and still permitted direct private investment in desirable projects. Extensive regulation of money and capital markets was thus accompanied by an increased volume of private investments, provided transactions took place outside of the controlled markets, and the funds originated from undistributed profits. Hence, private and public investments rose at the same time. Private investment was limited to the private resources of concerns. The relative freedom of entrepreneurs in selecting their investment projects was indicative of the basic fact in economic rearmament: regulation was limited mainly to the credit system and to foreign trade and exchange. It did not extend to industrial and commercial concerns.

In the regulated credit system, public investment was dominant. Credit institutions were subjected to an extensive control of their business decisions. Private institutions had to further three governmentally determined goals: to facilitate the increase of funds for public investment; to help in lowering the rates of interest; to implement the restrictions upon concerns which were refused access to new funds. On all three accounts, Schacht's policy was successful. From 1933 to 1937, total public investment rose by more than 45 billion marks.[22] In lowering the rates of interest, the government determined the price it was willing to pay for its borrowed funds. Schacht thus realized the gains of a "bilateral" monopolist. He maximized the volume of public investment; he reduced the price paid for the public debt to the minimum attainable; and he obtained the possible maximum of funds under the prevailing conditions of the markets for the financing of rearmament.

Private bankers accepted willingly the regulation of money and capital markets. Why did the once so powerful banks agree to become agents of governmental investment planning? There were

[22]This was the estimate of Schacht and Schwerin-Krosigk in 1945 when they were investigated by American intelligence officers. The details of this estimate are still unknown.

three reasons for their cooperation. In the first place, money creation by the Reichsbank brought back liquidity to the banks. The crisis of the banks was overcome at the least inconvenience to the largest banks. In the second place, financing rearmament through special bills proved to be profitable to the banks. Purchase of special bills brought a high rate of return. The largest banks were able to liquidate their indebtedness to the Reich; they became again financially independent. In the third place, most bankers accepted the prediction implicit in the theory of compensatory finance that public investment through issue of special bills will end as soon as the level of full employment is reached. Government orders would then again be financed by sale of bonds to private banks who would thereby regain, so they hoped, their old position of power in the economy. No wonder that bankers praised Schacht publicly.[23] Yet the bankers were as mistaken as Schacht himself. They did not foresee that regulation would become a permanent feature of the regime. Most other markets were also regulated when economic rearmament was translated, under Goering, into a war economy during peacetime.

Schacht and the private bankers conceived of economic rearmament as a temporary policy which would reestablish Germany as a leading European power. Once this goal was achieved, rearmament could be gradually reduced; regulation of some markets would come to an end. It was here that Schacht and the other leaders made their most serious mistake. They did not realize that neither the generals nor the Nazis would ever consent to a substantial reduction in rearmament. Instead, these two allies of big business introduced the second Four-Year Plan. This Plan had a profound effect upon the future of Germany and the world. It scrapped the policy of economic rearmament which was limited to the building up of a modern German army. Its place was taken by a new policy to build up a war economy in time of peace. Under this new policy, regulation was no longer transitional nor limited to two fields of business. Regulation was extended to all essential markets. Schacht and his supporters thus became, unwittingly, the forerunners of a new economic system of state capitalism which developed in Nazi Germany after 1936.

The new economic policy also put an end to Schacht's "compensatory finance" in which "pre-financing" of rearmament was

[23] A monument of eulogy is the volume on *Probleme des deutschen Wirtschaftsleben* (Berlin, 1937, pp. 1-860). It was published by an institute on the science and business of banking and presented as a gift to Schacht on his sixtieth birthday.

accomplished without a substantial rise in prices or extensive regulation of all markets. Schacht was dismissed from his position in the central bank when he refused to support the system of "inflationary finance" which was introduced under the second Four-Year Plan under Goering. Schacht thus was responsible only for compensatory finance which was effective in its monetary and financial aspects. It failed in its main purpose because it was utilized to finance rearmament. It supported a policy that led ultimately to the destruction of Germany herself.

# CORPORATE REORGANIZATION UNDER CHAPTER X—A POST-MORTEM

*By* FRANCIS J. CALKINS
*Marquette University*

In its annual reports and its public releases analyzing various plans of reorganization under Chapter X of the National Bankruptcy Act, the Securities and Exchange Commission advocated use of the principle of absolute priority in the distribution of the valuation of the debtor corporation. This proposition was upheld by the United States Supreme Court in two noteworthy decisions written by Mr. Justice Douglas, a former chairman of the Commission.[1] It appears proper to examine the effects of the application of the principle of absolute priority in particular cases in an effort to determine the results of such action and to discuss some of the questions arising from such an examination.

The doctrine of absolute priority, strictly applied, may be stated as follows. In the distribution of values of a corporate successor to the debtor undergoing reorganization all claims must be satisfied fully in the order of their legal priorities in accordance with the laws of bankruptcy. This means that secured creditors must be satisfied by the underlying values assignable to the secured assets and any residual claim thereafter treated as a general claim, that junior creditors with unsecured claims must be satisfied out of the general free values of the debtor, and that only after all creditors have received full value for their claims, including interest arrears, can the holders of preferred and common equities, each in their turn, receive recognition of their interests in the debtor.

Application of the principle of absolute priority can probably best be justified by the fact of the incorporation into the National Bankruptcy Act of Chapter X, the statutory basis for reorganization of corporations, other than railroads, banks, insurance companies, and building and loan associations.[2] This led to the consequent application of the judicial precedents of the law of bankruptcy in an effort to secure "fair and equitable" treatment of claims as required by statute.[3]

Allocation of values according to legal priority requires a valuation of the enterprise if two or more classes of claimants are to receive recognition. This valuation must be made by capitalization of reasonably prospective earnings at a rate of return commen-

[1] *Case v. Los Angeles Lumber Products Co.*, 308 U.S. 106 (1939) and *Consolidated Rock Products Co. v. duBois*, 312 U.S. 510 (1940).

surate with the risks involved in the enterprise. If the reorganized firm can reasonably be expected to have operating revenues in excess of operating costs after adjustment for economies to be effected through reorganization, it has some value and continuation of the enterprise may be considered feasible. Inability of prospective operating income before interest and taxes but after depreciation and other financial charges to meet the fixed charges of the debtor corporation may be considered, at least implicitly, prima facie evidence that the valuation of the enterprise is insufficient to permit other than the primary claimants to receive recognition of their claims by the courts.

The implications are two-fold: 1, that the proper rate of capitalization is evidently in excess of the coupon rate required on the debtor's obligations before reorganization, and 2, that compromise of claims by a downward adjustment of the coupon interest rate or a simple change in the contractual claims to interest is insufficient for a legal reorganization. These decisions are necessary if any possible participation of junior creditor or equity interests in the reorganized enterprise is to be ruled out.

Examination of the results of reorganizations in which the principle of absolute priority has been applied reveals that there is a distinct possibility of injustice being done toward junior creditor or equity interests unless some leeway for possible error or for favorable economic conditions be afforded. This important conclusion is highlighted by the fact that reorganization plans are most likely to be effected and consummated by the courts during the rising part of the business cycle.

A study of the 35 reorganization cases in which the Commission has participated and issued advisory reports, affording a maximum of information concerning the principles and practices underlying the plan, was made in an effort to appraise the results of reorgani-

[2]Cf. T. K. Finletter, *The Law of bankruptcy Reorganization*, (1939), p.3.

[3]Legal journals have discussed the problem of "fairness" at length. Cf. B. Graham, "Fair Reorganization Plans," *Brooklyn Law Review*, 8:137-157 1938); M. Radin, "Fair, Feasible and in the Public Interest," *California Law Review*, 29:451-479 (1941); J. Bonbright and J. Bergerman, "Two Rival Theories of Priority Rights," *Columbia Law Review*, 28:127-165 (1928); H. Guthmann, "Absolute Priority in Reorganization," *ibid.*, 45: 739-754 (1945); A. Dean, "Review of Law of Corporate Reorganization," *Cornell Law Quarterly*, 26:537-591 (1941); J. Gilchrist, "Fair and Equitable Plan of Reorganization," *ibid.*, 26:592-620 (1941); Valuation by the S.E.C. in Reorganizations," *Harvard Law Review*, 55:125-134 (1941); J. Gerdes, "General Principles of Plans of Corporate Reorganization," *Univ. of Pennsylvania Law Review*, 89:39-62 (1940); H. Gardner, "S.E.C. and Valuation under Chapter X," *ibid.*, 91:440-465 (1943); "Distribution of Securities in Corporate Reorganizations," *Yale Law Journal*, 51:85-113 (1941), etc.

zation on the value of claims recognized by the courts. Of the 18 such cases reported prior to 1942, eight cases of reorganization consummated may be examined on the basis of financial returns and market prices of securities received under the plan from data readily available in *Moody's Manual of Industrials*.[4] A comparison may thus be made of the estimates made in the Commission's advisory reports with the actual results of operation by the reorganized enterprise.

TABLE 1

AVERAGE ANNUAL MARKET VALUE OF SECURITIES RECEIVED FOR CLAIMS AGAINST SELECTED CORPORATIONS REORGANIZED UNDER CHAPTER X, 1941-1946

| Corporation and Security | Value of Claim | Market Value of Securities Received 1941 | 1942 | 1943 | 1944 | 1945 | 1946 |
|---|---|---|---|---|---|---|---|
| National Radiator Corp. | | | | | | | |
| Debenture 5's | $1,341 | ..... | $ 244 | $ 392 | $ 466 | $ 776 | $ 960 |
| Griess-Pfleger Tanning Co. | | | | | | | |
| 1st mortgage 5½'s | 1,082 | $ 474 | 664 | 714 | 1,039 | 1,403 | 1,537 |
| 5½% Preferred stock | 155 | ..... | ..... | ..... | 28 | 50 | 54 |
| Common stock | ..... | ..... | ..... | ..... | 2 | 3 | 3 |
| Flour Mills of America, Inc. | | | | | | | |
| 6½% notes | 1,090 | ..... | ..... | 658 | 1,091 | 1,706 | 2,080 |
| Preferred stock | 146 | ..... | ..... | ..... | 42 | 18 | 22 |
| Deep Rock Oil Corp. | | | | | | | |
| 6% notes | 1,290 | ..... | ..... | ..... | 456 | 535 | 644 |
| 7% Preferred stock | 163 | ..... | ..... | ..... | 42 | 52 | 66 |
| Minnesota & Ontario Paper Co. | | | | | | | |
| 1st Mortgage 6's | 1,500 | 521 | 591 | 751 | 971 | 1,120 | 1,365 |
| 6% unsecured notes | 1,500 | 111 | 116 | 212 | 352 | 472 | 656 |
| Higbee Company | | | | | | | |
| 7% Preferred stock | 163 | ..... | 47 | 79 | 115 | 125 | 100* |
| 8% Preferred stock | 172 | | | | | | |
| McKesson & Robbins, Inc. | | | | | | | |
| 6% Preferred stock | 115 | 29 | 29 | 44 | 58 | 76 | 111 |
| Common stock | ..... | 3 | 3 | 5 | 6 | 8 | 12 |
| Philadelphia & Reading Coal and Iron Co. | | | | | | | |
| Ref. mortgage 5's | 1,220 | ..... | ..... | ..... | ..... | 862 | 886* |
| Conv. debenture 6's | 1,290 | ..... | ..... | ..... | ..... | 399 | 410* |

*Plus added values for stock on which no quotations are available.

Table 1 compares the market value (average of annual high and low prices) of securities received with the total principal and interest claims allowed by the courts. The total value of claims could have been realized by 1945 through sale of the new securities alloted to holders of old senior securities in two cases, Griess-Pfleger Tanning Co. and Flour Mills of America, Inc. The bondholders of McKesson & Robbins, Inc., were paid off as a part of the

[4]Of the 18 cases, one involved a liquidation, two were bridge companies, and two were financial concerns. Of the 13 industrials, one (Penn Timber Company) was not consummated before 1942.

plan of reorganization. Holders of old senior securities in Minnesota & Ontario Paper Co., and Higbee Co. could have realized all of their principal claim, without accrued interest or dividend claims which would be partially covered, through sale of the new securities at average 1946 prices. Holders of old bonds in National Radiator Corp. could have realized substantially all of their principal claim without interest arrears, while in the remaining two cases, a substantial part of the principal claim could have been recovered, 89 per cent for Philadelphia & Reading Coal and Iron Co., and 64 per cent in Deep Rock Oil Corp. notes.[5]

The conclusion may be drawn that if the old bondholder claims were the sole values recognized in the reorganization plan and the market value of the securities received exceeded in 1946 the amount of the claim, the bondholders or senior security holders benefited at the expense of excluded interests. Whether these results were affected by or even caused by wartime conditions of industrial prosperity or are a result of injustice done toward junior creditor or equity interests reduced or wiped out by the reorganization decree is a matter for more detailed investigation and interpretation. If injustice has been done in the past, it is now impossible to reverse the decisions made, but more precaution may be practiced in the future toward exclusion of interests which might prove to be of value at some future time.

The weight of evidence is increased by examination of the 1946 market value of securities received by holders of old junior claims or interests. In McKesson & Robbins, Inc., the holders of old preferred could have realized their full value of old par and most of their claim on unpaid cumulative dividends; in Higbee Co., the 8% preferred could have realized virtually all of their claim. In all the other cases the junior interests could have recovered little of their full claim; perhaps this result had occurred because of the relatively more favorable trend of affairs for the holders of senior claims.

These data give rise to a probable questioning of the application of absolute priority in reorganization for the apportioning of values among claimants. Yet there is an even more fundamental question to be considered, the valuation of the enterprise, for the apportioning must depend upon the size of the valuation to be

[5]The valuation used by the courts in the cases of Flour Mills of America, Inc., and Deep Rock Oil Corp. was above that recommended by the Commission in advisory reports. If the Commission estimates had been used, the probable market prices of new securities given to holders of old senior securities probably would have been much higher.

divided among the claimants. For conservative purposes and to eliminate the effect of convertible securities, bonds of the reorganized firm may be valued at the lower of market or par value. Under these circumstances, market valuations of the enterprise may be secured to compare with the estimates of "normal" or long-term valuation made by the Commission in their advisory reports and toward which the courts have shown a generally approving attitude.

TABLE 2

RELATIVES OF MARKET VALUE OF TOTAL SECURITIES OUTSTANDING[1] TO COMMISSION ESTIMATES OF VALUATION FOR SELECTED CORPORATIONS REORGANIZED UNDER CHAPTER X, 1941-1946

| Corporation | Commission Estimate (000) | Relatives 1941 | 1942 | 1943 | 1944 | 1945 | 1946 |
|---|---|---|---|---|---|---|---|
| National Radiator Corp. | $ 6,000 | .... | 19 | 31 | 37 | 60 | 75 |
| Griess-Pfleger Tanning Co. | 1,675 | 40 | 53 | 52 | 87 | 108 | 127 |
| Flour Mills of America, Inc. | 2,160 | .... | .... | 60 | 108 | 140 | 188 |
| Deep Rock Oil Corp. | 7,150 | .... | .... | .... | 192 | 222 | 261 |
| Minnesota & Ontario Paper Co. | 25,193 | 48 | 50 | 66 | 87 | 106 | 122 |
| Higbee Co. | 6,300 | 32 | 11 | 43 | 72 | 138 | n.a. |
| McKesson & Robbins, Inc. | 76,900 | 27 | 28 | 42 | 55 | 72 | 106 |
| Phila. & Reading Coal and Iron Co. | 20,100 | .... | .... | .... | .... | 108 | 112 |

[1]Fixed obligations valued at lower of market or par value.
n.a.: Not available.

Table 2 reveals that the market valuations in seven of the eight cases in 1946 exceeded that suggested by the Commission in 1940-1941. It may be argued that a market valuation of the company's securities is not a true valuation of the enterprise; yet over a period of time it should approximate the valuation of the enterprise. We may consider the long-term value as a type of "intrinsic" value[6] about which the market value fluctuates. It would appear that the Commission implicity has this concept in mind in its evaluation. One note of caution must be made in this connection, however, that while the market valuation of the firm's securities may fluctuate about the long-term average valuation, the cyclical swings in market valuation and in the financial condition of the firm itself may have been such as to indicate either an ability of the enterprise to have paid off the full senior claim or the senior claimants to have liquidated their full claim in the market. In the latter case a temporary injustice toward junior interests may exist; in the former, a permanent injustice may well be practiced.[7] Such an occurrence

[6]Cf. B. Graham and D. F. Dodd, *Security Analysis*, 2d ed. (1940), pp. 22-23.

[7]This was pointed out by the Commission in the case of the Griess-Pfleger Tanning Co. (5 S.E.C. 72) where a convertible debenture permitted the old bondholders to take over the voting power of the new enterprise.

would again indicate the desirability of some "safety valve" type of security to be given junior or equity claimants to insure against the potential injustice, even though such may never occur.

The divergence in valuation in the market from Commission estimates also raises a question of the methodology used by the Commission in making its valuations. This leads to an investigation of the estimates of earning power and of the rate of capitalization, the two components of valuation. Sizable errors in either estimate would lead to a faulty valuation, while offsetting errors would leave the valuation a result of fatuous "guesswork," subject to the probabilities of making exactly compensating errors in estimation.

TABLE 3

RELATIVES OF NET OPERATING INCOME FROM ACTUAL OPERATIONS TO COMMISSION ESTIMATES FOR SELECTED CORPORATIONS REORGANIZED UNDER CHAPTER X, 1941-1946

| Corporation | Commission Estimate (000) | Relatives 1941 | 1942 | 1943 | 1944 | 1945 | 1946 |
|---|---|---|---|---|---|---|---|
| National Radiator Corp. | $ 268 | 141 | 230 | 447 | 404 | 385 | 83 |
| Griess-Pfleger Tanning Co. | 150 | 236 | 210 | 208 | 265 | 219 | 501 |
| Flour Mills of America, Inc. | 250 | .... | 81 | 183 | 355 | 305 | 322 |
| Deep Rock Oil Corp. | 539 | .... | 445 | 388 | 358 | 414 | 464 |
| Minnesota & Ontario Paper Co. | 1,529 | 221 | 245 | 178 | 150 | 181 | 290 |
| Higbee Co. | 592 | .... | 70 | 138 | 159 | 160 | 407 |
| McKesson & Robbins, Inc. | 4,000 | .... | 286 | 416 | 508 | 460 | 510 |
| Phila. & Reading Coal and Iron Co. | 1,962 | .... | 184 | 250 | 295 | 131 | 440 |
| LaFrance Industries, Inc. | 230[1] | 236 | 86 | 267 | 268 | 119 | 682 |
| Atlas Refining Co. | 130[1] | .... | .... | 104 | 186 | n.a. | n.a. |
| Sayre & Fisher Brick Co. | 100 | .... | .... | .... | def. | def. | 63 |

[1]Estimate before depreciation; operating relative after depreciation.
n.a.: Not available.
def.: Deficit.

Earning power, according to the Commission, is measured as net income from operations after allowance for depreciation, but before any interest and Federal income taxes. A comparison of actual performance with Commission estimates of earning power was made with the results shown in Table 3. In every case investigated the Commission estimates were conservatively low, underestimating actual results by as much as 400 per cent. Further corroborative evidence is afforded by three additional cases listed on which data for complete analysis were insufficient. In one of these cases, Sayre & Fisher Brick Company, operating results were unfavorable until 1946, but with full reorganization economies achieved, it is estimated that 1947 operating results will exceed Commission estimates.

TABLE 4

RELATIVES OF ACTUAL SALES TO COMMISSION ESTIMATES FOR CORPORATIONS REORGANIZED UNDER CHAPTER X, 1941-1946

| Corporation | Commission Estimate (000) | Relatives 1941 | 1942 | 1943 | 1944 | 1945 | 1946 |
|---|---|---|---|---|---|---|---|
| National Radiator Corp. | $ 8,250 | 77 | 108 | 125 | 115 | 130 | 77 |
| Deep Rock Oil Corp. | 16,000 | .... | 120 | 123 | 129 | 127 | 149 |
| Minnesota & Ontario Paper Co. | 11,280 | 195 | 210 | 210 | 210 | 216 | 260 |
| McKesson & Robbins, Inc. | 105,000 | .... | 195 | 230 | 265 | 290 | 332 |

Argument may be raised that the variation of actual results for the period 1941-46 is the result of war activities and the postwar prosperity encountered by the firms investigated. Some credence to this view is given by a comparison of actual sales to the Commission estimates made in some reports. Table 4 reveals that the Commission estimates of sales volumes, when given, are below the actual revenues reported, 1942 through 1946. How much of this difference is due to higher prices received per unit of product, i.e., is the result of inflationary influences, and how much is due to greater unit sales volume than anticipated, is a subject for more detailed study, but the combined effect of the wartime and postwar economic conditions must be recognized. With a greater than expected sales volume, the effect of fixed expenses and costs is to increase net operating income by a greater proportion. It is somewhat doubtful, however, that the variation of net operating income from Commission estimates can be explained only by conditions of abnormal prosperity, since the effect of trend factors in unit sales of some goods produced by the enterprises was not taken into consideration by the Commission, although it is found in the actual results of the firms. On the other hand, it is quite possible that the estimates made by the Commission may prove accurate in the longer term future, particularly where no decided trend factor in unit sales is present, but it is just as probable that operating conditions and the financial structure of the firm may have also changed appreciably over the longer term. It would appear that Commission estimates should be viewed on the basis of a projected period not to exceed perhaps ten years from the date of reorganization.

Of more decisive effect on the variation of market valuation of the firm from Commission estimates is an analysis of the rates of capitalization. The actual operating incomes experienced show a greater excess over Commission estimates than the market valuation experience showed in comparison with similar Commission estimates; the cause must be found in low estimates by the Commission of the rate of capitalization. Table 5 verifies the conclu-

TABLE 5

COMPARISON OF MARKET RATES OF CAPITALIZATION TO COMMISSION ESTIMATES FOR SELECTED CORPORATIONS REORGANIZED UNDER CHAPTER X, 1941-1946

| Corporation | Commission Estimates | Market Rate of Capitalization[1] 1941 | 1942 | 1943 | 1944 | 1945 | 1946 |
|---|---|---|---|---|---|---|---|
| National Radiator Corp. | n.a. | ..... | 52.9 | 64.0 | 48.8 | 28.7 | 5.0 |
| Griess-Pfleger Tanning Co. | 10.0 | 54.0 | 35.8 | 35.7 | 27.5 | 18.2 | 35.4 |
| Flour Mills of America, Inc. | 12.0 | ..... | ..... | 35.2 | 37.0 | 25.1 | 19.9 |
| Deep Rock Oil Corp. | 10.0 | ..... | ..... | ..... | 14.0 | 14.0 | 13.2 |
| Minnesota & Ontario Paper Co. | 10.0 | 27.9 | 29.6 | 16.4 | 10.5 | 10.4 | 14.4 |
| McKesson & Robbins, Inc. | 8.7 | ..... | 53.8 | 52.0 | 48.0 | 33.2 | 25.1 |
| Higbee Co. | 9.8 | ..... | ..... | ..... | ..... | n.a. | n.a. |
| Phila. & Reading Coal & Iron Co. | 15-20 | ..... | ..... | ..... | ..... | 11.8 | 37.9 |

[1]Percentage of Operating Income before taxes to Market Valuation of Outstanding Securities valued at lower of par or market.

n.a.: Not available.

sion, one commented upon in deductive studies,[8] that the Commission uses low rates of capitalization in an effort to offset at least partially the conservative estimation of earning power. But since the relative variation between the estimates and those given by the market is greater for the rates of capitalization than for the earnings estimates, it would appear that the greater damage to the interests of claimants may be done in the valuation process by errors in the former than in the latter. Since the Commission undoubtedly has made extensive studies in the field of rates of capitalization in preparing its estimates, it would be of benefit to the public and particularly to those interested in the field of corporate finance and investment to have published the data used and the methods employed in the Commission estimates of proper rates of capitalization in particular cases. While this would naturally lead to enlarging the field of argument in reorganization and thus might be eschewed in the interests of expediency, release of such data and methodology might well lead to greater study and interest in this important field, and perhaps even to establishing some accepted principles. It appears that the Commission uses some type of average rate of capitalization, but the factors involved and the weight given each are not easily ascertainable. The wide dispersion of ratios of total market value of securities to the earnings of a firm before and after taxes and interest payments would appear to indicate that the factors involved in estimating a proper rate of capitalization are complex and not wholly dependent on the

[8]Cf. K. Field, "Strict-Priority-of-Liens Policies of Federal Agencies," *American Law School Review*, 9:1521-22 (1942); F. J. Calkins, "Valuation in Corporate Reorganization," *Notre Dame Lawyer*, 16:18-28 (1940); H. L. Jome, "New Schoolmaster in Finance," *Michigan Law Review*, 40:625-53 (1942).

market rate of return and risk considerations; this would indicate that a type of average is not necessarily the best estimate.

Summing up the evidence offered by a statistical post-mortem of the eight observable cases in which Commission advisory reports and sufficient subsequent data are available, it is found that Commission estimates of earning power in terms of operating income before interest and taxes have generally been low, and thus favorable to creditors by decreasing the valuation; and that estimates of the rate of capitalization have also been low, thus partially offsetting the former estimate by increasing the valuation and favoring the equity holders. These variations have led to a variation in the market valuation of the reorganized enterprise from the estimates used by the court as a basis for application of the principle of absolute priority. But since the principle of absolute priority is based upon an allocation of values in accord with bankruptcy priorities, an underestimation of the valuation of the firm may lead to inequities such as appear to have occurred.

The suggestion has been made that some type of security might well be used to counterbalance possible errors of judgment, some form of income bond or preferred stock for senior claimants instead of common stock, a heavy sinking fund feature to reduce the immediate value of new common stock, or stock purchase warrants good for no more than a decade.[9] Of these it appears that the last named would perhaps be the most feasible, particularly if made non-transferable, since it would be of value to exercise such a warrant only if a favorable turn of events occurred. The cash received therefrom by the corporation could be used to retire the securities allocated to the senior claimants of the old debtor firm, and the firm would thus be returned to its original owners or some junior creditors, at least. Indeed, such a provision of non-transferrability might well prove necessary to prevent perversion of the intent in authorizing such securities.

The Commission has denied the possibility of using warrants or options of any variety. This appears unfortunate, particularly when the authorities cited write only of management options.[10] The most potent objection which might be raised is the possibility of claimants being uninformed of the nature of warrants and thus might not use them when and if they come of value. This argu-

[9]Guthmann, *op. cit.*, pp. 751-752.

[10]7 S.E.C. 1, 26 (1940): *In the Matter of Childs Company*, S.E.C. Corporate Reorganization Release No. 67 (1946), pp. 35-36, citing Berle & Means, *Modern Corporation and Private Property*, pp. 200-201, and Graham and Dodd, *op. cit.*, pp. 644-645.

ment has been generally overlooked by financial writers who seem quite unaware of the large number of "widow and orphan" investors who might receive such issues. Yet these writers and financial analysts might well be the ones to inform the uninformed public of the value of such warrants before they expire; certainly the security salesmen should also be of assistance in this regard.

# SECONDARY RESERVE REQUIREMENTS

*By* J. BROOKE WILLIS
*Columbia University and Chase National Bank of the City of New York*

## *The Proposal*

On November 25, 1947, Marriner S. Eccles, then chairman of the Board of Governors of the Federal Reserve System, proposed that Congress give the Federal Open Market Committee power to require commercial banks to hold minimum special reserves in the form of short-term Government securities and other specified liquid assets. This proposal was the fourth in a list of five measures he advocated for combatting inflation and for the third time was officially recommended by the Board. It is said to have the Board's unanimous support.

The current proposal is essentially the same as that recommended in the Board's Annual Report for 1945 (published in June 1946). However, two other collateral measures recommended at that time are not now requested. These were the power to double existing statutory authority over cash reserve requirements and the power to place a maximum limit on the amount of long-term marketable securities a bank may hold in relation to its deposits. Moreover, as a concession to the opposition, Mr. Eccles is now willing to allow power to impose a secondary reserve requirement to expire in three years and to have it administered by the Federal Open Market Committee rather than by the Board of Governors. He still insists that the measure, if it is to be adopted, apply to *all* banks receiving demand deposits and not merely to member banks.

This required secondary reserve would be fixed uniformly for all banks, beginning possibly with an initial requirement of 10 per cent against demand deposits and 4 per cent against time deposits and approaching gradually the limits of 21 per cent and 10 per cent respectively.[1] Each change would be limited in amount to 5 percentage points against demand and 2 percentage points against time deposits and would require 60 days' notice. The particular assets eligible to satisfy the new requirement would be:

1. Treasury bills, certificates of indebtedness, and Treasury notes having a maturity not exceeding two years at time of issue.

[1]In the 1945 Annual Report of the Board no percentage requirements were stipulated although a figure of 25 to 30 per cent of net demand deposits was mentioned at that time by officials in the Reserve Board in published speeches.

In the proposed bill, demand and time deposits have the meanings given such terms by regulations prescribed from time to time by the Board of Governors of the Federal Reserve System pursuant to Section 19 of the Act.

2. The aggregate amount of the following cash assets which a bank holds in excess of 20 per cent of its demand and 6 per cent of its time deposits: (a) Coin and currency in vault. (b) Demand deposits due *from* other banks to the extent that they exceed demand deposits due *to* other banks, (c) Deposits with a Federal Reserve Bank, (d) Cash items in process of collection.

Roughly speaking, assets eligible to meet the requirement in the case of member banks would include short-term Government securities plus the excess of cash assets over existing primary reserve requirements. It is to be noted that bonds due within one year would not be eligible to satisfy the requirement.

The application of the proposed special reserve formula to various groups of insured banks as of June 30, 1947, is illustrated in Tables 1 and 2 in Appendix A[2]. Reference to these tables will show that the banks would have had an excess of special reserve assets if the requirement had been imposed at a level of 10 per cent against demand and 4 per cent against time deposits, but would have had a substantial deficit if the requirement had been imposed at the proposed maximum level of 25 per cent against demand and 10 per cent against time deposits. New York City banks held the smallest amounts of eligible assets relative to their deposits, while country member banks and nonmember banks held the largest amounts. Differences among individual banks were, of course, much greater than those shown for various groups of banks.

### *Arguments for the Plan*

In presenting the plan originally, the Board argued that a special secondary reserve requirement was needed to limit the ability of commercial banks to sell short-term Government securities to the Federal Reserve Banks for the purpose of acquiring long-term, higher yielding Government securities or other loans and investments. In his testimony Mr. Eccles continued to emphasize the desirability of preventing banks from shifting from short-term Government securities to private loans but called attention to the fact that the recent policy of allowing short-term rates to rise had been successful in discouraging banks from shifting from short to long-term Government securities. However, he said, it was impossible to tell how high short-term rates would have to rise to discourage private loans, and maintained that the rise in short-term rates had gone about as far as was justified under the then existing circumstances.

[2]Prepared by the Board of Governors of the Federal Reserve System.

The main argument presented by Mr. Eccles in support of the proposed special reserve requirement is the inability of the Reserve System to check credit expansion through the use of existing powers without at the same time causing the prices of Government obligations to decline below par. In order to check credit expansion by orthodox means the Reserve System would not only cease buying Government obligations but possibly would begin reducing its holdings in order to eliminate member bank excess reserves. The elimination of excess reserves would reduce the availability of bank credit and would cause interest rates to rise, short-rates advancing more rapidly than long-rates. If such action were taken by the Reserve authorities, the prices of Government obligations would experience a substantial decline.

The alleged necessity for the new power to prevent credit expansion, therefore, rests fundamentally upon the assumption that the prices of Government securities must be supported indefinitely at arbitrary levels by the Federal Open Market Committee. These support operations themselves constitute one of the principal sources of new cash reserves which in turn facilitate the further expansion of bank loans and investments.

### *Advantages Claimed*

With the aid of the secondary reserve requirement Mr. Eccles declared that the Reserve System could "offset" increases in bank reserves and could check credit expansion without disturbing the Government securities market. While Mr. Eccles listed a number of advantages which, in his opinion, the proposed device would have over other methods of restricting credit expansion, he did not explain in any detail how the device would operate to achieve these results. Rearranged for purposes of analysis the more important advantages claimed were:[3]

(1) The main effect of the plan would be to reduce the availability of bank credit. This would be accomplished by putting restraint on the lenders, that is, the banks, which would be less able to sell Government obligations in order to expand credit.

(2) Though the plan would have about the same effect in limiting credit expansion as an increase in primary reserve requirements, it would enable banks to retain the same volume of earning assets they now hold. An increase in primary

[3]Statement before the Joint Committee on the Economic Report, Special Session of Congress, November 25, 1947.

reserve requirements, on the other hand, would make it necessary for banks to reduce earning assets, with adverse effects upon their earnings position.

(3) The ratio of potential credit exponsion on a given increase in reserves would be reduced. If the special reserve requirement were raised to the maximum, the ratio of expansion would be lowered from six to one to nearly two and one-half to one.

(4) The plan would restore the use of the customary instruments of Reserve policy, namely discount rates and open-market operations. The Federal Reserve System would be enabled to make it more difficult and costly for banks to borrow at the Federal Reserve Banks.

(5) The special reserve requirement would bring about an increase in interest rates on private debt without increasing the interest cost on the public debt or permitting unstable prices in the Government securities market. The plan, in effect, would divorce the market for private debt from the market for Government securities.

In order to test the validity of Mr. Eccles' claims and to show how the special reserve requirement would have to be administered if it were to prove effective three case studies of the proposal are set forth on the following pages. Each of the cases studied assumes on increase in primary reserves. The three cases chosen for study are those postulated by Mr. Eccles in his arguments for the special reserve requirement.

Case I treats of additions to member bank reserves arising from increases in the gold stock. Mr. Eccles estimated that gold imports over the next twelve months will range between two and three billion dollars. This estimate seems high but doubtless gold imports will be substantial.

Case II treats of additions to member bank reserves arising from the sale of Government securities to the Federal Reserve Banks by holders other than commercial banks. Such purchases would be made to sustain the prices of Government obligations. On September 30, 1947, non-commercial bank holders held about 12 billion dollars of short-term obligations, owned mainly by corporations, and 59 billion dollars of marketable Government bonds, mainly long-term, owned principally by insurance companies and savings banks.

Case III treats of the additions to member bank reserves arising from the sale of Government bonds by commercial banks to the Federal Reserve Banks. Such purchases would be made also to sustain the prices of Government obligations. On September 30, 1947, commercial banks held marketable Government obligations totaling 69 billion dollars.

In each case it is assumed that the secondary reserve requirement is established at a percentage level high enough to freeze completely the reserve eligible securities already held by commercial banks. For illustration this figure is assumed to be 25 per cent of demand deposits. At this percentage level the banks are assumed initially to hold no excess primary or secondary reserves.[4]

### *Case I*

### *Reserves Arising From Additions to the Gold Stock*

Case I attempts to show how the special reserve requirement would affect potential loan and deposit expansion of commercial banks if an increase occurred in the monetary gold stock. Over the past year gold imports have been the primary factor leading to the rise in bank reserves. As already noted, Mr. Eccles, estimates that gold imports during the coming year will continue to be substantial.

*Maximum Loan and Deposit Expansion.* If $1,000 of gold were added to the monetary stock, the following changes would occur in the balance sheet of member banks:

All Member Banks

| *Assets* | | *Liabilities* | |
|---|---|---|---|
| Due from F. R. Banks | + $1,000 | Deposits | + $1,000 |

Under these conditions the required reserves of member banks would increase by $200 (assuming a 20 per cent primary reserve requirement) leaving $800 in excess primary reserves. On this basis, if there were no secondary reserve requirement, loans could theoretically expand by $4,000 with a resulting further increase in deposits, illustrated as follows:

[4]While Mr. Eccles' secondary reserve proposal applies to all commercial banks, the illustrations to be given are confined to "member banks". The reason is that all commercial banks, member and nonmember, would become subject not only to the same secondary reserve requirement but also, inevitably to the same primary reserve requirement.

All Member Banks

| *Assets* | | *Liabilities* | |
|---|---|---|---|
| Due from F. R. Banks (required) | + $1,000 | Deposits | + $5,000 |
| Loans | + 4,000 | | |
| Total net changes | + $5,000 | | + $5,000 |

How would the above result be modified, if, in addition to the primary reserve requirement of 20 per cent, a fixed secondary reserve requirement of 25 per cent were in effect? As before, with a primary reserve requirement of 20 per cent of deposits the required reserves of member banks would be increased by $200 leaving excess primary reserves of $800. To meet a secondary reserve requirement of 25 per cent of deposits, member banks would, doubtless, for the sake of income, purchase $250 of short-term Government securities which, it is assumed, they acquire from non-bank holders.

But the process would not stop at this point. Deposits would rise commensurately with earning assets, and with each rise in deposits additional secondary reserves would be required. The process could continue until the following limits were reached:

All Member Banks

| *Assets* | | *Liabilities* | |
|---|---|---|---|
| Due from F. R. Banks (required) | + $1,000 | Deposits | + $5,000 |
| Secondary reserves (required) | + 1,250 | | |
| Loans | + 2,750 | | |
| Total net changes | + $5,000 | | + $5,000 |

This example indicates that even with theadoption of Mr. Eccles' proposal, deposits have expanded by $5,000 or by the same amount as would be true at the present time. In other words, the establishment of a fixed secondary reserve requirement in itself does not affect the amount of deposit expansion, the significant factor in inflationary pressures.

The expansion in deposit totals by $5,000 resulted from the increase in the gold stock ($1,000), from the acquisition of short-term Government securities ($1,250) from non-bank holders and from the extension of loans ($2,750). Under present reserve require-

ments loan expansion could have amounted to $4,000. Mr. Eccles' proposal in forcing banks to acquire short-term Government securities to the amount of $1,250 has held loan expansion down to $2,750.

*Preventing Loan Expansion.* Loan expansion, which Mr. Eccles seems to regard as particularly inflationary, could be entirely prevented in the above example only if the percentage of required secondary reserves were raised above the initial level of 25 per cent. In fact it would have to be raised to 80 per cent of deposit *expansion* (making the combined primary and secondary reserve requirement 100 per cent on *new* deposits).[5] The *changes* in the condition of the commercial banks would then appear as follows:

All Member Banks

| *Assets* | | *Liabilities* | |
|---|---|---|---|
| Due from F. R. Banks | + $1,000 | Deposits | + $5,000 |
| Loans | no change | | |
| Secondary reserves (required) | + 4,000 | | |
| Total changes | + $5,000 | | + $5,000 |

It will be noted that while loans have not expanded, deposits have risen by the same amount as in the first example, $5,000. Of this increase $1,000 resulted from the increase in the gold stock and $4,000 from the *required* purchase of reserve eligible securities from non-commercial bank holders.

Potential *loan* expansion obviously is reduced by raising the secondary reserve requirement (instead of leaving it unchanged). This action forces a greater expansion in secondary reserves. Total potential *deposit* expansion is the same in any case and consequently inflationary pressures have not necessarily been curbed. In other words, as long as commercial banks acquire their reserve eligible short-term Government obligations from non-commercial bank holders, multiple deposit expansion will occur, even under Mr. Eccles' proposals. As pointed out above the potential supply from this source is large.

*Limiting Deposit Expansion.* Deposit expansion could be *limited* in Case I, if the Reserve Banks were to sell reserve eligible securities to commercial banks.[6] If, for example, following an increase

[5]The percentage level would depend on the size of the deposit base.

[6]Deposit expansion could also be limited if the primary reserve requirement were raised.

of $1,000 in the gold stock, the Reserve Banks were to sell $800 of reserve eligible securities to member banks, member bank primary reserves would be reduced to $200. The member bank balance sheet would show the following changes:

All Member Banks

| *Assets* | | *Liabilities* | |
|---|---|---|---|
| Due from F. R. Banks | | Deposits (arising from | |
| + $1,000 | | increase in gold | |
| — 800 | + $ 200 | stock) | + $1,000 |
| Reserve eligible securities | + 800 | | |
| | + $1,000 | | + $1,000 |

At the conclusion of the transaction, member banks would have $200 in primary reserves (the required minimum) and $800 in secondary reserves ($550 in excess of the required minimum). Further deposit expansion would be checked. But it must be noted that under a fixed secondary reserve requirement of 25 per cent, member banks are not compelled to purchase reserve eligible securities to an amount in excess of $250. Since member banks are not compelled to buy all the securities being sold by Reserve Banks, their yields would tend to rise. To prevent the adverse effect of open-market sales on yields, the secondary reserve requirement would need to be raised above the initial 25 per cent. Only if it were raised, in this example to 80 per cent of the deposit increase resulting from gold, would member banks be *compelled* to purchase $800 of securities from the Reserve Banks. Loan expansion would be prevented and deposit expansion above the original $1,000 also would be prevented. This would result from the fact that a reserve of 100 per cent (20 per cent primary and 80 per cent secondary) would be required against the deposit *increase* arising from the rise in the gold stock.[7]

*Summary of Case I.* Case I assumed that new cash reserves would arise from additions to the gold stock. It was demonstrated that, with primary and secondary reserve requirements *fixed* at the

[7]In this and the other examples, it is assumed that increases in member bank secondary reserves would consist of short-term Government obligations. While it is true that increases in secondary reserves could consist of balances with the Reserve Banks over and above primary reserve requirements, member banks, for the sake of the additional income, would probably wish to maintain their secondary reserves in the form of short-term Government obligations.

proposed figures, deposits could expand by $5,000, the same potential amount at as present, provided that no action were taken by the Reserve System and member banks bought reserve eligible securities from non-bank holders. However, loans would expand by $2,750 instead of by $4,000 as at present. The difference ($1,250) between these amounts is represented by the required purchases of reserve eligible securities.

If the Reserve System wished to *prevent* all loan expansion and to *prevent* secondary deposit expansion it would be necessary for the Reserve Banks to sell reserve eligible securities to member banks *and* simultaneously to raise the secondary reserve requirement above its initial level. The secondary reserve requirement would need to be raised to 80 per cent of the initial deposit *increase* due to the rise in the gold stock (making combined primary and secondary reserve requirements equal to 100 per cent of the *increase* in deposits). It would appear, therefore, that Mr. Eccles' proposal would not accomplish its purpose unless the Reserve System were given complete discretionary power to raise secondary reserve requirements. If it were given and were to use such power, the effect of the secondary reserve requirement would be to remove commercial banks from the loan market and to relegate them to the sole function of providing a market for Government obligations. In consequence, the commercial loan demand would be shifted to other institutions.

### *Case II*

### *Sales of Government Obligations by Nonmember Bank Holders to the Federal Reserve Banks*

If commercial banks were unable to meet the demand for business loans, this demand would tend to be shifted to other institutions (insurance companies, finance companies, etc.) unless, of course, potential borrowers themselves had marketable securities which could be liquidated.

If insurance companies were called upon to meet a loan demand (ordinarily met by commercial banks) they probably would obtain the funds required by liquidating long-term Government obligations. In the absence of any other market, the Federal Reserve Banks would purchase these obligations in order to prevent a rise in yield. Purchase of these obligations by the Federal Reserve Banks would cause the deposits and primary reserves of member banks to rise by an equivalent amount, illustrated as follows:

**All Member Banks**

| *Assets* | | *Liabilities* | |
|---|---|---|---|
| Due from F. R. Banks | + $1,000 | Deposits | + $1,000 |

Although the basic cause of the rise in deposits and primary reserves is the purchase of long-term Government obligations by the Reserve Banks, the result is the same as was observed in the case of the increase in the monetary gold stock.

To prevent any loan expansion on the part of commercial banks and to prevent deposits from rising above $1,000, the reserve System would have to be given permission to raise secondary reserve requirements to 80 per cent of the deposit increment. This would enable the Reserve Banks to sell $800 of short-term Government securities (eligible reserve securities) to member banks which, under the higher secondary reserve requirement, they would be compelled to purchase.

If business corporations, unable to borrow from commercial banks, were to liquidate their holdings of Government obligations, the Reserve Banks (in the absence of other demand) would have to purchase these obligations to prevent their yields from rising. Member bank deposits and reserves would rise and the sequence would be identical with the above illustration.

Case II emphasizes the fact that if commercial banks are prevented from meeting loan demands, other institutions will do so and in order to obtain the necessary funds will shift their Government obligations to the Reserve Banks—the only market in event of an intense loan demand. The Reserve System would have to raise secondary reserve requirements (the action described) if multiple credit expansion were to be prevented.

### *Case III*

### *Sale of Long-Term Government Obligations*

### *By Commercial Banks to the Federal Reserve Banks*

Although a fixed secondary reserve requirement would prevent member banks from selling short-term reserve eligible securities for the purpose of acquiring cash reserves to make new loans, the requirement would not prevent sale of their holdings of long-term Government obligations. If member banks themselves were to sell long-term Government obligations to the Federal Reserve Banks, their balance sheet would appear as follows:

All Member Banks

| *Assets* | | *Liabilities* | |
|---|---|---|---|
| Long-term Government obligations | — $1,000 | Deposits | no change |
| Due from F. R. Banks | + 1,000 | | |

Inasmuch as the deposit liabilities of member banks have not changed, the entire $1,000 of new cash reserves would represent excess primary reserves. If Mr. Eccles' proposal were adopted in its present form and if member banks acquired the obligations needed to meet secondary reserve requirements from non-commercial bank holders, the expansion in credit induced by the increase in primary reserves could approach the following limits:[8]

All Member Banks

| *Assets* | | *Liabilities* | |
|---|---|---|---|
| Long-term Government obligations | —$1,000 | Deposits | +$5,000 |
| Due from F. R. Banks | + 1,000 | | |
| Secondary reserves | + 1,250 | | |
| Loans | + 3,750 | | |
| | +$5,000 | | +$5,000 |

The loan and deposit expansion set forth in this example could be prevented only if the Reserve Banks were to sell $1,000 of short-term United States obligations to member banks and, by raising the secondary reserve percentage, were to compel them to buy such obligations. In effect, the member banks would be compelled to exchange long-term Government securities for short-term reserve eligible securities.

*Conclusions*

Under present laws *increases* in member bank reserves arising from additions to the gold stock can, of course, be offset by reductions in Government securities held by the Federal Reserve Banks. The possibility of increases in member bank reserves arising from sales of Government securities to the Federal Reserve Banks on the part of non-commercial bank and commercial bank holders can be prevented by the refusal on the part of the Reserve Banks to purchase the public debt. The exercise of existing powers such as

[8]It is worthy of note that in this case, where new primary reserves arise from the sale of long-term Government securities by commercial banks to Federal Reserve Banks, the theoretical *loan* expansion is $3,750 as compared with $2,750 in Case I.

these, however, conflicts with the policy of supporting the prices of Government securities at arbitrary levels. Consequently Mr. Eccles has argued that a new power is needed, the fractional secondary reserve requirement, by which he declares credit expansion can be prevented at the same time that the prices of Government securities are supported. The analysis in this paper has shown that the proposed advice would not succeed in limiting total credit expansion.[9]

Obviously a fixed special reserve requirement (if sufficiently high) would prevent commercial banks from acquiring new primary reserves though the sale of short-term Government securities to the Federal Reserve Banks, but it could not prevent reserves from arising in any other way, e.g., through additions in the gold stock, through the sale of long-term Government securities by non-commercial banks and commercial bank holders to the Federal Reserve Banks and through the inflow of currency from circulation. The analysis in this paper has shown that although a *fixed* special reserve requirement would prevent the total *loan* expansion on the basis of a given increment in reserves from becoming as great as if the requirement did not exist, it would not limit the potential *deposit* expansion (which measures the real degree of monetary inflation). Total asset expansion and deposit expansion would be the same with or without the requirement, if banks could acquire reserve eligible securities from non-bank holders. The only difference would lie in the composition of total assets.

The amount of reserve-eligible securities which commercial banks could acquire from non-bank holders is substantial. On September 30, 1947, nearly 12 billion dollars of short-term reserve eligible securities (out of a total of 48.5 billion dollars) were held outside commercial banks and Federal Reserve Banks. Except for debt retirement, additions to this supply will occur with the passage of time as maturing obligations are refunded into certificates and notes.

Commercial banks would be unable to expand their holdings of reserve-eligible securities only if the available supply of such securities were restricted and completely controlled by the Reserve Banks. Failure to control the *volume* of reserve-eligible securities

[9]Mr. Eccles apparently believes that the secondary reserve requirement would be effective in preventing loan expansion even if established at a fixed level which did not entirely freeze the reserve-eligible securities held by the banks. His reason for this belief is that, since some part of the short-term Government securities held by the banks would be frozen, the remaining free secondary reserves (in excess of the established requirement) would be insufficient for liquidity purposes.

is a basic mechanical weakness of the proposed device as a credit control mechanism. To correct this weakness it would become necessary eventually either to remove all reserve-eligible securities from non-bank hands or to convert existing bank holdings of such securities into non-negotiable forms.

This development would permit the authorities to designate any arbitrary rate of interest to be paid on such securities and to regulate their volume in accordance with the need of the Treasury for funds rather than by overall credit considerations.

For their effectiveness in controlling credit, reserve requirements depend not upon the particular percentages imposed, but rather upon control of the *volume* of reserve-eligible assets. If the volume of reserve-eligible assets is limited, a low reserve requirement will be quite as effective as a high reserve percentage. If the volume of reserve-eligible assets is not controlled, no fixed reserve requirement will prove effective in limiting the expansion of commercial bank deposits. The basic weakness, practically and theoretically, of the proposed special reserve requirement is that it introduces in the required reserve base a new kind of reserve, short-term Government securities, a substantial amount of which is held outside the banking system, and the future volume of which may change with the Federal budget and the refunding policies of the Treasury.

To be effective in preventing *loan expansion*, the secondary reserve requirement, under existing conditions, would have to be raised whenever the banks acquired new cash reserves. The case studies in this paper showed that the requirement would have to be raised by an amount equal to 80 per cent of deposit increases, arising from increases in the gold stock or from the sale of Government securities by non-bank holders. With a primary reserve requirement of 20 per cent, this would mean total reserves of 100 per cent against *net additions* to deposit totals.

To be effective in preventing *multiple deposit expansion*, the proposed secondary reserve requirement would need to be reinforced by the sale of reserve-eligible securities by the Federal Reserve Banks to member banks or by an increase in primary reserve requirements. Such sales of reserve-eligible securities would have to be accompanied by simultaneous increases in member bank secondary reserve requirements in order to force member banks to take the securities being sold, as otherwise their yields would rise. If the primary and secondary reserve requirements together amounted to 100 per cent of net additions to deposit totals, addi-

tions to the gold stock and sales of Government obligations by non-bank holders to the Reserve Banks would result merely in an equivalent increase in deposit totals. No multiple expansion would be possible.

Mr. Eccles' proposal, as formulated, could not possibly insulate the long-term Government securities' market from the market for private loans and would, in all likelihood, become a source of recurring disturbance. This is what Mr. Sproul of the Federal Reserve Bank of New York had in mind when he argued that "unless the requirement is reduced to the point where it will exert little restraint on bank lending we shall be faced with the probability of mass dumping of longer-term Government securities by deficit banks."

Even if Mr. Eccles' proposal were adopted, the Reserve Banks could not make effective use of the customary instruments of credit control. As soon as the customers' lending rates rose sufficiently high, commercial banks would shift their long-term Government obligations to the Reserve Banks, an action which would nullify other attempts to control credit.

The various advantages which Mr. Eccles claimed for his plan are seen to be without foundation. The ratio of potential bank credit expansion (in the form of bank deposits) is not reduced. The market for private debt is not divorced from the market for public debt. The problem of public debt management is not solved.

The alleged necessity for the proposed measure is based on the assumption that the prices of Government securities must be supported indefinitely at arbitrary levels. The validity of this basic assumption should be re-examined before a radical departure is made in the regulation of American banking. The proposed secondary reserve requirement is not only technically defective but it would seriously alter the functions of commercial banks in the loan and investment markets.

## APPENDIX A

### TABLE 1

### ILLUSTRATIVE COMPUTATION OF SPECIAL RESERVE ASSETS, JUNE 30, 1947

(Based on aggregate figures in millions of dollars, by groups of banks)

| Assets | Member Banks | | | | Non-member insured banks |
|---|---|---|---|---|---|
| | Central reserve city | | Reserve city | Country | |
| | New York | Chicago | | | |
| 1. Gross demand deposits | 22,683 | 5,037 | 31,983 | 27,659 | 11,891 |
| 2. Time deposits | 1,459 | 871 | 11,269 | 14,475 | 6,349 |
| 3. Coin and currency | 123 | 36 | 470 | 780 | 395 |
| 4. Cash items in process of collection | 1,884 | 349 | 2,623 | 834 | 124 |
| 5. Excess of demand balances due from over demand deposits due to other banks in U. S.* | ..... | ..... | ..... | 2,546 | 2,765 |
| 6. Balances with Federal Reserve Banks | 4,166 | 973 | 6,274 | 4,628 | ..... |
| 7. Net cash assets* (3 + 4 + 5 + 6) | 6,173 | 1,357 | 9,367 | 8,787 | 3,284 |
| 8. Deduct 20% of gross demand deposits plus 6% of time deposits | 4,624 | 1,060 | 7,073 | 6,400 | 2,759 |
| 9. Excess cash assets* (7 — 8) | 1,549 | 298 | 2,294 | 2,387 | 525 |
| 10. Treasury bills, certificates, and notes | 2,015 | 606 | 4,874 | 5,191 | 2,932 |
| 11. Total special reserve assets* (9 + 10) | 3,564 | 904 | 7,168 | 7,578 | 3,457 |
| 12. Special reserve required at given percentages: | | | | | |
| a. 10% against demand and 4% against time deposits | 2,327 | 539 | 3,649 | 3,345 | 1,443 |
| b. Maximum of 25% against demand and 10% against time deposits | 5,817 | 1,346 | 9,123 | 8,362 | 3,608 |
| 13. Deficiency or excess of special reserve assets:* | | | | | |
| a. With 10% against demand and 4% against time deposits | +1,237 | +365 | +3,519 | +4,234 | +2,014 |
| b. With 25% against demand and 10% against time deposits | —2,253 | —443 | —1,954 | —784 | —151 |
| 14. Percentage deficiency or excess of special reserve assets to demand deposits: | | | | | |
| a. With 10% against demand and 4% against time deposits | +5.5 | +7.2 | +11.0 | +15.3 | +16.9 |
| b. With 25% against demand and 10% against time deposits | —9.9 | —8.8 | —6.1 | —2.8 | —1.3 |

*Figures shown for these items are computed on the basis of aggregates by groups of banks for the country as a whole; totals of figures computed separately for individual banks or from aggregates by districts would show somewhat different amounts of available cash assets for some of the groups.

### TABLE 2

### RATIOS OF AVAILABLE SPECIAL RESERVE ASSETS AND SHORT-TERM TREASURY BONDS TO GROSS DEMAND DEPOSITS, ALL INSURED COMMERCIAL BANKS, JUNE 30, 1947

| Central Reserve City Member Banks | Percentage of gross demand deposits | | | Deficiency or excess of special reserve assets if requirements are | | | |
|---|---|---|---|---|---|---|---|
| | Treasury bills, certificates and notes | Excess cash assets[a] | Total special reserve assets | 25% of demand and 10% of time deposits | 10% of demand and 4% of time deposits | Treasury bonds due or callable[b] | |
| | | | | | | Within 1 year | Within 1-5 years |
| New York | 8.9 | 6.8 | 15.7 | — 9.9 | + 5.5 | 5.7 | 27.8 |
| Chicago | 12.0 | 5.9 | 17.9 | — 8.8 | + 7.2 | 4.2 | 23.4 |

| Reserve City Member Banks | Percentage of gross demand deposits: Treasury bills, certificates and notes | Excess cash assets[a] | Total special reserve assets | Deficiency or excess of special reserve assets if requirements are 25% of demand and 10% of time deposits | Deficiency or excess of special reserve assets if requirements are 10% of demand and 4% of time deposits | Treasury bonds due or callable[b]: Within 1 year | Treasury bonds due or callable[b]: Within 1-5 years |
|---|---|---|---|---|---|---|---|
| Boston | 10.3 | 7.1 | 17.5 | — 8.6 | + 7.1 | 5.1 | 18.3 |
| New York | 9.3 | 9.4 | 18.7 | —11.8 | + 6.5 | 3.5 | 31.7 |
| Philadelphia | 6.7 | 8.3 | 14.9 | —11.3 | + 4.4 | 1.5 | 22.6 |
| Cleveland | 8.0 | 6.4 | 14.4 | —14.2 | + 3.0 | 7.1 | 33.7 |
| Richmond | 12.9 | 7.4 | 20.3 | — 7.0 | + 9.4 | 2.5 | 32.5 |
| Atlanta | 14.4 | 8.7 | 23.2 | — 3.9 | +12.3 | 3.5 | 20.0 |
| Chicago | 20.6 | 7.1 | 27.7 | — 2.7 | +15.5 | 5.9 | 36.9 |
| St. Louis | 10.3 | 6.3 | 16.6 | —10.2 | + 5.9 | 5.1 | 24.2 |
| Minneapolis | 8.8 | 7.3 | 16.1 | —10.7 | + 5.4 | 3.7 | 28.0 |
| Kansas City | 16.8 | 6.0 | 22.7 | — 3.7 | +12.2 | 4.8 | 19.1 |
| Dallas | 13.3 | 6.1 | 19.4 | — 7.1 | + 8.8 | 2.2 | 18.4 |
| San Francisco | 22.9 | 7.6 | 30.5 | — .9 | +17.9 | 6.1 | 31.3 |
| Total | 15.2 | 7.2 | 22.4 | — 6.1 | +11.0 | 4.9 | 27.8 |
| **Country Member Banks** | | | | | | | |
| Boston | 12.6 | 6.4 | 18.9 | —11.1 | + 6.9 | 5.0 | 37.3 |
| New York | 12.7 | 9.3 | 21.9 | —11.5 | + 8.6 | 4.3 | 45.7 |
| Philadelphia | 18.7 | 10.1 | 28.8 | — 4.4 | +15.5 | 5.0 | 41.4 |
| Cleveland | 17.8 | 11.1 | 28.9 | — 3.5 | +15.9 | 4.8 | 40.2 |
| Richmond | 17.0 | 8.5 | 25.5 | — 3.9 | +13.8 | 4.3 | 31.8 |
| Atlanta | 19.7 | 5.1 | 24.8 | — 3.3 | +13.6 | 3.9 | 25.0 |
| Chicago | 21.6 | 10.5 | 32.1 | + .6 | +19.5 | 5.9 | 41.8 |
| St. Louis | 21.7 | 3.8 | 25.5 | — 3.2 | +14.0 | 4.0 | 28.7 |
| Minneapolis | 23.8 | 6.4 | 30.2 | — .3 | +18.0 | 7.3 | 39.8 |
| Kansas City | 26.1 | 9.6 | 35.8 | + 9.3 | +25.2 | 3.2 | 18.8 |
| Dallas | 21.3 | 11.1 | 32.4 | + 6.6 | +22.1 | 2.9 | 16.7 |
| San Francisco | 17.6 | 7.9 | 25.5 | — 4.9 | +13.3 | 6.9 | 33.9 |
| Total | 18.8 | 8.6 | 27.4 | — 2.8 | +15.3 | 4.7 | 34.3 |
| **Nonmember Insured Commercial Banks** | | | | | | | |
| Boston | 19.2 | 1.2 | 20.3 | —15.8 | + 5.9 | 5.6 | 41.5 |
| New York | 15.1 | 1.7 | 16.8 | —16.2 | + 3.6 | 4.5 | 39.9 |
| Philadelphia | 20.9 | .3 | 21.2 | —11.1 | + 8.3 | 3.8 | 35.6 |
| Cleveland | 22.0 | 4.8 | 26.8 | — 6.3 | +13.5 | 4.6 | 37.6 |
| Richmond | 20.4 | .2 | 20.6 | — 9.2 | + 8.7 | 5.8 | 29.5 |
| Atlanta | 25.2 | 6.8 | 32.0 | + 3.8 | +20.7 | 3.0 | 22.9 |
| Chicago | 29.0 | 5.9 | 34.9 | + 3.1 | +22.2 | 4.6 | 39.8 |
| St. Louis | 25.0 | 4.7 | 29.7 | + 2.7 | +18.9 | 2.2 | 22.5 |
| Minneapolis | 39.6 | 3.9 | 43.5 | +12.8 | +31.2 | 6.4 | 32.5 |
| Kansas City | 28.0 | 7.3 | 35.3 | + 8.6 | +24.6 | 2.9 | 20.5 |
| Dallas | 16.5 | 10.4 | 27.0 | + .8 | +16.5 | .9 | 18.3 |
| San Francisco | 19.6 | .6 | 20.1 | —16.6 | + 5.5 | 7.7 | 39.3 |
| Total | 24.7 | 4.4 | 29.1 | — 1.3 | +16.9 | 4.2 | 31.0 |

[a]Total of (1) balances with Federal Reserve Banks, (2) excess of demand balances due from over demand deposits due to banks in United States, (3) coin and currency, and (4) cash items in process of collection, *less* (5) the sum of 20 per cent of demand deposits and 6 per cent of time deposits.

[b]These ratios are based on estimated holdings of such Treasury bonds.

# TERM LOANS TO SMALL BUSINESS IN CALIFORNIA, 1945-46

*By* PAUL F. WENDT
*University of California*

Member banks of the Federal Reserve system held 144,000 term loans (loans outstanding with a maturity over one year) amounting to $4.6 billion or 34 per cent of their total business loan volume, according to a survey of member bank loans outstanding to commercial and industrial concerns on November 20, 1946.[1]

The results of the survey showed that the dollar amount of term loans outstanding was roughly double that of any prewar year, although the ratio of term loans to total loans was about the same as before the war.[2] It was found that almost three-fourths of all member banks had term loans outstanding to business in November, 1946, indicating a broader participation by lending banks than in prewar years.

An important finding of the Federal Reserve 1946 study was that term loans, hitherto considered primarily a device for accommodating large businesses, represent an important source of funds for medium and small business concerns, and that over one-half of the term credit made available by banks to small business was to relatively new concerns.

Particular attention was drawn to the activity of banks in the San Francisco Federal Reserve District in granting term loan credit to medium and small businesses. It was estimated that banks in that district held an estimated 41,000 term loans, amounting to $479 million as of the date of the survey, representing 28.6 per cent of the total number and 10.5 per cent of the amount of term loans by member banks in all Federal Reserve districts.

In view of the recent development of term loan accommodation to small business and its importance to the capital problems of new

[1] A. R. Koch, "Business Loans of Member Banks," *Federal Reserve Bulletin*, March, 1947; D. McC. Holthausen, "Term Lending by Commercial Banks in 1946," *Federal Reserve Bulletin*, May, 1947.

[2] *Ibid.* Estimates for the years 1937-40 were published in Neil H. Jacoby, and R. J. Saulnier, *Term Lending to Business*, New York, National Bureau of Economic Research, 1942. The estimates in this earlier study were based upon questionnaire returns from only 99 of 210 commercial banks to which questionnaires were mailed during June, 1941, while the 1946 survey by the Board of Governors of the Federal Reserve System was based upon a sample of the business loans of all large member banks and data on all business loans of a sample number of smaller member banks. Approximately 2,000 member banks representing 26 per cent of all Federal Reserve member banks, and 83 per cent of total commercial and industrial loans outstanding on June 29, 1946, submitted questionnaires to the Board of Governors of the Federal Reserve System.

and small enterprises, and because of the leading position assumed by banks in the San Francisco Federal Reserve District in granting this type of credit, it is the purpose of the present study to:

a. Describe the term loan in relation to other types of bank credit granted by certain large branch banks in California in in 1945 and 1946.

b. Describe in detail 6,893 term loans granted to small businesses by one of these banks and outstanding on September 23, 1946.

c. Appraise the recent growth in the use of this type of loan as a source of additional income to banks and as a source of capital funds to small business.

Large California banks typically administer term loans to small business in installment credit or monthly payment loan departments, where other types of personal and business credit payable in monthly installments are supervised. A few banks have established separate loan classifications within these departments for term loans to small business, while others classify such loans variously as "personal," "Veterans Administration Guaranteed," "Merchandise and Equipment Purchase," or other subclassifications of monthly payment loans.

Term loans over $50,000 are administered and reported by most large banks together with Commercial Department loans. These larger term loans differ markedly in their characteristics from term loans to small business and are usually supervised by personnel specially trained in bond and investment analysis.

Table 1 shows the number and amount of loans (excluding loans secured by real estate and renewals) granted by three large branch banks in California, accounting for 60 per cent of total commercial bank loans in the State, in 1945 and during the first eight months of 1946. It can be noted that total business loans granted increased substantially in 1946 over 1945 and that monthly payment loans expanded as a percentage of both the number and amount of loans granted.

Based upon the term loans reported separately by one of the banks and estimates of the volume of term loans for other banks in the State, the total volume of term loan credit, excluding loans secured by real estate, granted by commercial banks in California during 1945 and 1946, is estimated in Table 2.

Based upon estimates by the California State Board of Equalization that there were approximately 231,625 retail trade and ser-

TABLE 1

TOTAL LOANS MADE BY THREE LARGE CALIFORNIA BANKS FOR THE CALENDAR YEAR 1945 AND JANUARY 1-AUGUST 31, 1946, EXCLUDING REAL ESTATE LOANS AND RENEWALS.[a]

| *Type of Loan* | January 1-December 31, 1945 Number 000's | Amount $000's | Average $ loan | January 1-August 31, 1946 Number 000's | Amount $000's | Average $ loan[b] |
|---|---|---|---|---|---|---|
| Monthly Payment Loans | | | | | | |
| To Dealers, Auto | 35.0 | $ 20,707 | $ 591 | 41.1 | $ 29,548 | $ 718 |
| To Dealers, Other | 42.5 | 11,012 | 259 | 64.5 | 32,653 | 506 |
| To Indiv., Auto. | 49.7 | 67,224 | 674 | 98.3 | 76,156 | 775 |
| FHA, Title I. | 34.4 | 12,217 | 355 | 46.1 | 18,762 | 407 |
| Personal (Incl. T.L.[c]) | 237.2 | 59,367 | 250 | 228.9 | 64,749 | 283 |
| Vet. Adm. Guar. (T.L.[cd]) | ..... | 134 | 16,750 | .6 | 1,462 | 2,529 |
| Mdse. & Equip. Pur. (T.L.[c]) | 25.9 | 19,720 | 762 | 40.1 | 43,082 | 1,075 |
| Term Loans, Other[c] | 2.5 | 9,121 | 3,709 | 6.5 | 23,664 | 3,617 |
| Total Monthly Payments | 432.2 | $199,502 | $ 462 | 526.1 | $290,076 | $ 551 |
| Total Commercial Dept. Loans excluding Real Estate & Renewals[c] | 275.3 | $1,739,770 | $ 6,320 | 176.6 | $1,485,794 | $8,412 |
| Grand Total | 707.5 | $1,939,272 | $ 2,741 | 702.7 | $1,775,870 | $2,527 |
| Percentage Monthly Payment to Total | 61.0% | 10.3% | ..... | 75.0% | 16.4% | ..... |

[a]Partly estimated.
[b]Arithmetic average, median probably lower.
[c]Some term loans included in these classifications by reporting banks.
[d]Loans to veterans reported in other classifications in addition.

TABLE 2

ESTIMATES OF TERM LOANS TO BUSINESSES OF DIFFERENT SIZES IN 1945 AND 1946

| | Year 1945 Number 000 | Amount $000 | Year 1946 Number 000 | Amount $000 |
|---|---|---|---|---|
| Terms Loans to Small Business (Assets Under $250,000) | 5-8 | $ 25,000-$ 40,000 | 15-20 | $ 60,000-$ 80,000 |
| Term Loans to Business with Assets over $250,000 | [a] | $100,000-$150,000 | [a] | $200,000-$250,000 |

[a]Not available. One California bank made approximately 50 term loans to large corporations during the year 1946, totaling approximately $80 million. The arithmetic average is not representative of the size of the typical loan because two or three large loans distorted the total figures. These estimates were made before the results of the Federal Reserve study were published. That study showed total term loans outstanding in member banks in the Twelfth Federal Reserve District on November 20, 1946, excluding real estate loans, of approximately $325 million.

vice outlets in the State on June 30, 1946, and using the Federal Reserve Board estimate that approximately 24,000 retail and service concerns in the San Francisco district were obtaining term loan accommodation in 1946, it appears that approximately 10 per cent of licensed retail outlets in the State received term loan accommodation in 1945 and 1946 and that such loans probably repre-

sented between 33 per cent and 60 per cent of their total business borrowings.[3]

The characteristics of term loans to small business in California can be learned from examination of 6,893 loans outstanding on September 23, 1946, in one California bank which established a separate department to provide intermediate term capital to qualified individuals for initiating, expanding, or purchasing small businesses, beginning in April, 1945.

The term loans to be described may be defined as extensions of credit for capital purposes to individuals, partnerships, or corporations, for commercial, industrial or professional enterprises. The loan may be secured or unsecured (real estate loans are excluded); for any amount, with a final maturity of 12 months or longer; and with a definite program of payments: monthly, quarterly, or semi-annually. Usually the terms of the note are supplemented by an agreement specifically designed to aid the borrower to discharge his indebtedness in a manner which may be considered most effective in relation to the earnings of the business. The qualifications for term loans in the bank studied are:

1. A satisfactory character record.
2. A year's business experience or its equivalent in demonstrated capacity.
3. Savings or net worth equal to one-third of the required investment.
4. A definite need for the business in the community.

Financial statements and copies of income tax returns are required for a number of years. In addition, a term loan agreement is usually required, which specifies the amount of salaries and withdrawals permitted, limits the investment in fixed assets, and specifies minimum capital and minimum accounting records and prescribes the schedule of repayments, usually calculated as a fixed amount per month plus a percentage of net profits. Although the terms of these agreements may be onerous to individual small businessmen at times, it is the author's conclusion that they represent a constructive influence toward educating and improving small business management.

Term loans are typically granted on a discount basis varying from 3 per cent to 5 per cent of the face amount of the loan. These

[3] *Federal Reserve Bulletin*, May, 1947, Table 21. This estimate is confirmed by the study of the sample of 6,893 term loans analyzed in Table 3, showing that 85 per cent of the estimated term loans to small business in California in 1946 were to retail trade and service businesses.

rates are equivalent to effective annual interest rates calculated on declining balances of 5.70 per cent to 9.70 per cent. Interest rates vary inversely with the size of the loan. Loans for smaller amounts are limited to shorter maturities and bear higher discount rates, while larger loans are granted for longer terms and usually bear lower discount rates. It is customary to allow exercise of some discretion by the branch office manager granting the loan in fixing the discount rate, within limits of one-half of 1 per cent. At no additional cost to the borrower above the discount rate charged, the lending bank in all cases obtains insurance coverage on the life of the borrower, through a blanket insurance policy for the amount of the unpaid balance of the loan. Table 3 shows the relation between the amount of the term loan and the maximum monthly repayment period which is generally adhered to. It is the practice to require a minimum ratio of net annual profits of 65 per cent of the amount of the loan for loans maturing in 3 years, 50 per cent for loans maturing in 4 years, and 35 per cent for 5-year loans; after taxes, salaries and all withdrawals.

TABLE 3

RELATION BETWEEN AMOUNT OF LOAN AND MAXIMUM REPAYMENT PERIOD FOR TERM LOANS TO SMALL BUSINESS OF A CALIFORNIA BANK

| Amount of Loan | Maximum Monthly Repayment Period |
|---|---|
| $ 500-$1,499 | 2 years |
| 1,500- 2,999 | 3 years |
| 3,000- 4,999 | 4 years |
| 5,000-and more | 5 years |

The term loans to small business outstanding in September, 1946, in one California branch bank were predominantly to concerns in the retail and service businesses with net worth under $20,000. Loans averaged $3,800 in amount (Table 4). Many loans to manufacturing concerns exceeded $50,000 in amount and were classified as Commercial Department loans, hence were excluded from the loans examined.

TABLE 4

ANALYSIS OF 6,893 TERM LOANS TO SMALL BUSINESS OUTSTANDING ON SEPTEMBER 23, 1946, IN A CALIFORNIA BANK

| Type of Business | Number of Loans | Percentage of number of loans | Total Amount of Loans | Percent of Amount of Loans | Average Amt. per Loan | Average Net Worth of Borr. |
|---|---|---|---|---|---|---|
| Retail | 3,151 | 45.64 | $13,177,010 | 49.42 | $4,182 | $15,663 |
| Service | 2,721 | 39.54 | 9,301,264 | 34.88 | 3,418 | 13,162 |
| Manufac. | 758 | 11.15 | 2,921,439 | 10.96 | 3,854 | 16,817 |
| Wholesale | 263 | 3.67 | 1,265,352 | 4.74 | 4,811 | 20,987 |
| Total | 6,893 | 100.00 | $26,665,065 | 100.00 | $3,868 | $15,005 |

Over 85 per cent of the number of term loans granted were for maturities of 3 years or less, while 40 per cent of the maturities were between one and two years (Table 5). Since only 65 per cent of the term loans outstanding in all member banks on November 20, 1946, were for terms of 3 years or less, it can be concluded that term loans to small business in California are typically of shorter maturities than for the nation as a whole.[4]

TABLE 5

ANALYSIS OF 6,893 TERM LOANS TO SMALL BUSINESS OUTSTANDING ON SEPTEMBER 23, 1946 IN ONE CALIFORNIA BANK BY TERM IN MONTHS

| Term in Months | Number of Loans | Percentage of Loans |
|---|---|---|
| 12 months and under | 1,413 | 20.5% |
| 13-24 | 2,871 | 41.5 |
| 25-36 | 1,759 | 25.6 |
| 37 and above | 850 | 12.4 |
| Total | 6,893 | 100.0% |

Tabulation of the proposed use of funds by type of business (Table 6) demonstrates that over 50 per cent of the number of loans made to concerns in the retail and service lines were for the purchase of an interest in an existing business or for starting a new business, compared with only 25 per cent of the number of loans made to concerns in the manufacturing and wholesale businesses. Concerns in the latter fields used the proceeds of loans primarily for additions to working capital or increasing inventory. Approximately 20 per cent of the total number of loans were used for the purchase of machinery or for plant expansion. It may be concluded from the facts shown that term loans provide an important source of capital for new ventures in trade and service lines. This is confirmed by the finding in the Federal Reserve Board 1946 study that more than a third of the amount and number of term loans outstanding to enterprises with assets under $250,000 was to businesses organized since 1942. It should be pointed out that the manufacturing concerns represented in the sample of California small business term loans analyzed were predominantly small concerns and that the loans observed cannot be considered typical of term loans to larger corporations.[5]

[4] *Federal Reserve Bulletin*, May, 1947, Table 1, p. 499. The difference can be partially explained by the inclusion in the Federal Reserve study of business loans secured by real estate.

[5] Cf. Neil H. Jacoby and R. J. Saulnier, *Term Lending to Business*, p. 35.

## TABLE 6

### ANALYSIS OF 6,893 TERM LOANS BY USE OF FUNDS AND TYPE OF BUSINESS

| Use of Funds | Number of Loans: Retail | Ser-vice | Mfg. | Wh'l-sale | Total | Percentage of Number of Loans: Retail | Ser-vice | Mfg. | Wh'l-sale | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. Buy Exist. Business (100% control of Bus.) | 1,080 | 667 | 49 | 17 | 1,813 | 34.3 | 24.5 | 6.4 | 6.7 | 26.3 |
| 2. Start New Business | 473 | 415 | 96 | 30 | 1,014 | 15.0 | 15.3 | 12.4 | 11.9 | 14.7 |
| 3. Buy Int. in Existing Bus. (less than 100% control) | 136 | 132 | 37 | 7 | 312 | 4.3 | 4.9 | 4.8 | 2.8 | 4.5 |
| 4. Buy Out Partner | 159 | 114 | 23 | 7 | 303 | 5.0 | 4.2 | 3.0 | 2.8 | 4.4 |
| 5. Buy Mach. & Equip. | 235 | 656 | 193 | 46 | 1,130 | 7.4 | 24.1 | 25.2 | 18.2 | 16.4 |
| 6. Expand Plant | 93 | 123 | 54 | 13 | 283 | 2.9 | 4.5 | 7.0 | 5.1 | 4.1 |
| 7. Increase Invent. | 434 | 133 | 78 | 47 | 692 | 13.8 | 4.9 | 10.2 | 18.6 | 10.1 |
| 8. Modernize | 121 | 63 | 8 | 5 | 197 | 3.9 | 2.3 | 1.0 | 2.0 | 2.9 |
| 9. Working Capital | 324 | 336 | 204 | 72 | 936 | 10.3 | 12.3 | 26.6 | 28.4 | 13.5 |
| 10. Consolidate Debt | 96 | 82 | 26 | 9 | 213 | 3.1 | 3.0 | 3.4 | 3.5 | 3.1 |
| Total | 3,151 | 2,721 | 768 | 253 | 6,893 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

## TABLE 7

### ANALYSIS OF 6,893 TERM LOANS BY TYPE OF BUSINESS AND NET WORTH

*Type of Business*:

Number of Borrowers with Net Worth at Time Loan Was Made.

| | Under $5,000 | $5,000-9,999 | $10,000-24,999 | $25,000-49,999 | Over $50,000 | Total |
|---|---|---|---|---|---|---|
| **Retail** | | | | | | |
| Grocery | 111 | 166 | 187 | 58 | 23 | 545 |
| Bar | 29 | 30 | 87 | 59 | 21 | 226 |
| Restaurant | 195 | 170 | 208 | 65 | 25 | 663 |
| Other | 405 | 431 | 597 | 212 | 72 | 1,717 |
| Total Retail | 740 | 797 | 1,079 | 394 | 141 | 3,151 |
| **Service** | | | | | | |
| Shoe Repair | 34 | 15 | 14 | 5 | — | 68 |
| Cleaning and Dye. | 74 | 50 | 46 | 11 | 9 | 190 |
| Gar. & Serv. Station | 258 | 171 | 167 | 50 | 27 | 673 |
| Hotel-Motel | 29 | 25 | 24 | 21 | 12 | 111 |
| Other | 638 | 380 | 437 | 152 | 72 | 1,679 |
| Total Service | 1,033 | 641 | 688 | 239 | 120 | 2,721 |
| **Manufacturing** | | | | | | |
| Metal | 46 | 50 | 86 | 26 | 14 | 222 |
| Wood | 39 | 41 | 51 | 18 | 8 | 157 |
| Textile | 12 | 7 | 9 | 4 | 1 | 33 |
| Other | 92 | 77 | 112 | 47 | 18 | 346 |
| Total Manufacturing | 189 | 175 | 258 | 95 | 41 | 758 |
| Wholesale-Jobber | 58 | 62 | 76 | 40 | 27 | 263 |
| Grand Total | 2,020 | 1,675 | 2,101 | 768 | 329 | 6,893 |

Over half of the term loan borrowers had net worth under $10,000, and over 80 per centhad net worth under $25,000 (Table 7). Median net worth was lower for firms in service and retail businesses than for manufacturers and wholesalers. These results are consistent with the Federal Reserve Board findings that approximately 65 per cent of the total number of term loans were to borrowers with total assets under $50,000.[6]

The ratio of average net worth to the average amount of the loan was generally higher for small loans than for loans of larger amounts (Table 8). It will also be noted that, regardless of the size of the loan, this ratio is lower for loans granted for purposes of establishing or purchasing a business than for other purposes. Explanation of this might be found in the existence of Veterans Administration Guarantee, chattel mortgage or other type of addel security on many loans to new businesses. It may also be explained that established businesses typically are of larger net worth than new businesses and that the bank has made particular effort to accommodate the needs of new businesses in postwar years.[7]

TABLE 8

ANALYSIS OF 6,893 TERM LOANS BY USE OF FUNDS AND RATIO OF NET WORTH TO AVERAGE ORIGINAL AMOUNT OF LOAN

| | Ratio of Average Net Worth to Average Original Amount of Loan | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Average Amt. of Loan | Under $1,000 | $1,000-1,999 | $2,000-2,999 | $3,000-4,999 | $5,000-7,499 | $7,500-9,999 | Over $10,000 | Total |
| Use of Funds: | | | | | | | | |
| Buy Exist. Bus. .... | 5.36 | 4.23 | 3.53 | 3.00 | 2.87 | 2.45 | 2.33 | 2.91 |
| Start New Bus..... | 4.71 | 4.72 | 4.54 | 2.86 | 3.20 | 2.78 | 3.17 | 3.46 |
| Buy Into Exist. Bus. | 4.33 | 3.96 | 2.84 | 3.09 | 2.56 | 2.13 | 3.14 | 2.90 |
| Buy Out Partner..... | 3.42 | 5.29 | 4.76 | 3.58 | 2.76 | 2.85 | 2.45 | 3.18 |
| Buy Mach. & Equip. | 8.32 | 6.09 | 4.98 | 4.14 | 3.49 | 3.54 | 2.99 | 4.18 |
| Expand Plant ..... | 11.61 | 9.37 | 6.91 | 5.35 | 4.69 | 3.99 | 4.29 | 5.14 |
| Increase Inventory.. | 8.86 | 7.57 | 6.99 | 5.09 | 5.15 | 4.09 | 4.11 | 5.51 |
| Modernize ..... | 9.77 | 6.37 | 10.31 | 6.06 | 6.74 | 5.92 | 6.13 | 6.64 |
| Working Capital .... | 8.56 | 7.66 | 5.42 | 4.75 | 4.06 | 2.81 | 4.13 | 4.78 |
| Consolidate Debt .... | 10.87 | 7.09 | 5.51 | 4.30 | 3.72 | 2.52 | 2.44 | 3.67 |
| Total ..... | 7.31 | 5.91 | 4.87 | 3.74 | 3.63 | 3.14 | 3.17 | 3.90 |

Although the term loan to small business has not been subjected to the test of a business depression, and it is too early to develop useful loss ratios, it may be inferred from the data examined and from statistics of business failures that term loans to borrowers of net worth under $5,000 represent a substantial risk of bank

[6] *Federal Reserve Bulletin*, March, 1947, Table 2, p. 256.

[7] It is likely that existence of added security was a requirement insisted upon in granting loans to concerns having a small net worth ratio to the amount of the loan. An energetic effort on the part of the bank to finance individuals seeking to start or purchase new businesses was undoubtedly an additional factor accounting for the results of Tables 8 and 9.

funds.[8] A more detailed analysis of 2,020 term loans to borrowers of net worth under $5,000, by type of business (Table 8), shows that the bank "matches dollars" with the small businessman in many trade and service lines. Because the loans are typically under $3,000, they are granted for terms of 3 years or less, at a discount rate of 4 per cent to 6 per cent, calculated as a percentage of the face amount of the loan at time of granting. (See Table 3.) These rates are equivalent to effective annual interest rates calculated on declining balances of 7.7 per cent to 11.7 per cent.

The evidence in Table 9 shows that for each dollar of net worth the bank advanced a dollar of term loan credit to borrowers of net worth under $5,000. It was estimated in the Federal Reserve Board study that term loan credit represented approximately 30 per cent to 35 per cent for small retail business and 60 per cent to member bank loans to retail and service businesses.[9] Based upon these percentages, it can be estimated that the ratio of average net

TABLE 9

ANALYSIS OF 2,020 TERM LOANS TO BORROWERS OF NET WORTH UNDER $5,000 BY TYPE OF BUSINESS, AVERAGE AMOUNT OF LOAN, AND AVERAGE NET WORTH AT TIME OF GRANTING THE LOAN

| Type of Business | Number of Loans | Avg. Amt. of Loan | Average Net Worth | Ratio of Avg. Net Worth to Avg. Amt. of Loan |
|---|---|---|---|---|
| Retail | | | | |
| Grocery | 111 | $3,120 | $2,920 | 0.94 |
| Bar | 29 | 2,853 | 2,779 | 0.97 |
| Restaurant | 195 | 2,812 | 2,588 | 0.92 |
| Other[a] | 405 | 2,429 | 2,600 | 1.07 |
| Service | | | | |
| Shoe Repair | 34 | 2,002 | 2,259 | 1.13 |
| Cleaning and Dye. | 74 | 2,239 | 2,042 | 0.91 |
| Gar. & Serv. Station | 258 | 2,204 | 2,567 | 1.16 |
| Hotel-Motel | 29 | 2,933 | 2,127 | 0.73 |
| Other | 638 | 2,305 | 2,429 | 1.05 |
| Manufacturing | | | | |
| Metal | 46 | 1,813 | 3,078 | 1.70 |
| Wood | 39 | 2,375 | 2,499 | 1.05 |
| Textile | 12 | 2,275 | 2,249 | 0.98 |
| Other[b] | 92 | 2,112 | 2,871 | 1.36 |
| Wholesale—Jobber | 58 | 2,691 | 2,423 | 0.90 |
| Total | 2,020 | $2,415 | $2,543 | 1.05 |

[a]Includes 5 loans not reported in any classifications shown.
[b]Includes 1 loan not reported in any classification shown.

[8]Quincy Adams, "Business Success, What Are the Odds?", *Dun's Review*, June, 1946; U. S. Department of Commerce, "Recent Changes in the Business Population," *Survey of Current Business*, May, 1946; California State Board of Equalization, "Number of Outlets Licensed to Sell Tangible Property in California by Type of Business, June 30, 1943-June 30, 1946," Unpublished table, 1946.

[9]*Federal Reserve Bulletin*, May, 1947, p. 516, Table 20.

worth to *total* commercial bank borrowings was approximately 30 per cent to 35 per cent for small retail businesses and 60 per cent to 65 per cent for small service businesses. Additional sources of credit are available to these businesses through manufacturers, wholesalers, and other financing agencies. It should be noted that the rate of return to the lending bank on term loans to small businesses is high, thus compensating for the risk involved.

Approximately 40 per cent of the total number of term loans studied were unsecured, while the balance were secured by chattel mortgage, Veterans' Administration Guarantee, or by other guarantee, (Table 10). In numerous cases in which the loan was secured by a combination of various types of security, the loan was classified under that type of security which was deemed most important by the reporting branch official. Almost one-third of the term loans to small business were secured by chattel mortgage. It was estimated that only about 70 per cent of the total number of Veterans' Administration guaranteed or insured term loans were reported in this classification, the balance being included under other types of security as the most predominant. Government guarantee therefore constituted a portion of the security in roughly one-fifth of the total number of term loans to small business.[10]

The characteristics of the 6,893 term loans studied differ substantially from the term loans to larger concerns described in *Term Lending to Business*.[11] The term loans previously described were typically granted to large manufacturing, public utility or extraction enterprises, in many cases for terms exceeding 5 years, at low interest rates, with the proceeds to be used for retirement of bonds. The results of the recent Federal Reserve Board study have shown that the characteristics of term loans to larger concerns have changed little. Term loans granted to small trade and service concerns, however, are typically for amounts under $4,000 and for periods of 3 years or less. In many cases the proceeds are used for

[10]It was estimated in the Federal Reserve 1946 study that only 3.4 per cent of the total amount of secured term loans to all businesses and 1.3 per cent of the total number of secured term loans were secured by Government participation or guarantee. The very substantial difference in results in the present study of 6,893 term loans to small business in California may be attributed to several factors: (1) Difficulties in classification of loans secured by several kinds of security; (2) the inclusion of loans secured by real estate in the Board study; (3) more active participation in the G. I. loan program by the bank studied than by other banks; (4) Column 19 of the reporting form and instructions sent out with the Federal Reserve questionnaire did not specifically include by name "Veterans Administration Guaranteed or Insured Loans," but used instead the expression "Federal G. I. Loan." *Federal Reserve Bulletin*, March, 1947, p. 262.

[11]Neil H. Jacoby and R. J. Saulnier, *Term Lending to Business*, p. 50.

TABLE 10

ANALYSIS OF 6,893 TERM LOANS BY TYPE OF SECURITY AND BUSINESS

| | Number of Loans | | | | | |
|---|---|---|---|---|---|---|
| Type of Business | Unsecured | Guarantor | Chattel | Veterans Adm. Guar. or Ins. | Other | Total |
| Retail | | | | | | |
| Grocery | 217 | 58 | 205 | 52 | 13 | 545 |
| Bar | 94 | 32 | 84 | 9 | 7 | 226 |
| Restaurant | 202 | 85 | 292 | 81 | 3 | 663 |
| Other | 911 | 163 | 372 | 226 | 45 | 1717 |
| Total | 1424 | 338 | 953 | 368 | 68 | 3151 |
| Service | | | | | | |
| Shoe Repair | 14 | 12 | 31 | 11 | ..... | 68 |
| Cleaning & Dye. | 51 | 22 | 82 | 33 | 2 | 190 |
| Garage & Serv. Station | 305 | 81 | 194 | 79 | 13 | 673 |
| Hotel-Motel | 46 | 17 | 29 | 14 | 5 | 111 |
| Other | 622 | 164 | 509 | 344 | 40 | 1679 |
| Total Service | 1038 | 296 | 845 | 481 | 60 | 2721 |
| Manufacturing | | | | | | |
| Metal | 96 | 10 | 100 | 13 | 3 | 222 |
| Wood | 58 | 15 | 59 | 24 | 1 | 157 |
| Textile | 16 | 5 | 4 | 7 | 2 | 33 |
| Other | 140 | 32 | 119 | 50 | 5 | 346 |
| Total Manufacturing | 310 | 62 | 282 | 94 | 11 | 758 |
| Wholesale—Jobber | 119 | 24 | 50 | 57 | 13 | 263 |
| Grand Total | 2891 | 720 | 2130 | 1000 | 152 | 6893 |

purchasing an existing business or establishing a new one. Although roughly the same proportion of term loans to small business was secured as for the sample of term loans to large corporations studied in 1941, the character of the security differed.

The inverse correlation between the size of commercial bank term loans and the interest rates charged, noted in the 1941 study as resulting from the substantial fixed costs of making a credit investigation and administering term loans, has continued in present day practice for loans to both large and small businesses.

The term loans to small business granted by California banks in 1945-46 represent an adaptation of the principles of orderly repayment to the old 90-day renewable type of commercial loan, with added safety features for the lender and with the advantages of a systematic loan plan for the borrower. Term loans have represented 28 per cent of the amount of total business loans by commercial banks in the San Francisco district and 33 per cent of the total number of such loans.[12] It is estimated that between 25 per

[12] *Federal Reserve Bulletin*, May, 1947, Table 13, p. 511.

cent and 30 per cent of the amount and over 90 per cent of the total number of term loans in this district were made to concerns with total assets under $250,000. These proportions are substantially higher than for the country as a whole because of the concentration of term lending to larger corporations in New York and because of the greater relative importance of small retail and service businesses in California than in other sections. Term loan credit to small businesses in California at the end of the year 1946, including business loans secured by real estate, probably exceeded 150,000,000.[13] It is evident that this type of loan accommodation represents an important source of capital to the small or new concern and at the same time is providing an expanding outlet for loanable bank funds.

In general the standards of acceptance for term loan credit risks in California have been maintained at a high level. Loans to borrowers of net worth under $5,000, which probably carry the highest degree of risk for the bank, are generally confined to maturities under 3 years and as such bear discount rates of 5 per cent or over. The geographical and business diversification permitted large California branch banks is an added protective feature. In view of the small amounts and relatively short maturities of many of the loans, the existence of some type of security in approximately two thirds of the cases is important. Veterans' Administration guarantee on approximately 20 per cent of the term loans to small business adds to their security features. Some evidence exists that banks have been more active in granting G. I. loans in California than in other sections of the country. The extension of intermediate term credit should be more advantageous to both the borrower and the lender than former methods of extending short-term renewable loans, since the lender has the assurance of a planned schedule of repayments, security, and limitation upon the conduct of the business while the debts exist; and the borrower has assurance of the use of the funds over a definite period, and is constrained by the loan agreement to follow out a businesslike plan for extinguishing the debt. Term loan agreements provide a forceful means of educating small business management and thus strike at the heart of the financial problems of small business.

Public regulatory officials have pointed to dangers in too rapid expansion of term loan volumes.[14] The American Bankers Association has urged the application of the term loan principle to the

[13] *Ibid.*

[14] *Annual Report* of the Comptroller of the Currency, 1944, p. 5; 1945, p. 2.

needs of small business and has encouraged the establishment of special small business term loan departments.[15] It has been suggested in a study published by the Association of Reserve City Bankers that the nature of deposit liabilities, the character of the portfolio, the capital resources and the demand for other types of bank accommodation be considered in deciding on the extent to which an individual bank should grant term loans.[16] Appraisal of these factors for Twelfth District banks reveals that the ratio of cash and short-term government bond holdings to demand deposits remains high and that real estate and consumer loans, although increasing rapidly, represent a small portion of total bank assets.[17] For many reasons, the ratio of capital funds to assets is lower than desirable. It does not appear, however, that term loans should be restricted for this reason alone in view of the importance of these loans for banks as a source of earnings and to business as a source of capital.

A more acceptable procedure than restriction of the volume of term loans to business for preventing large bank losses in this type of credit and for assuring a continued flow of term credit to small business exists in sharpening the tools for bank appraisal of small business earning power and in the application to term loans of analytical techniques used in appraising bond investments.[18]

California banks which are successfully administering the growing volume of term loans to small business are aiming toward these objectives in the following ways:

*First*: Banks are maintaining accurate up-to-date information regarding their outstanding term loans, including such facts as the amount of the loan, method of repayment, security, term in months, business of borrower, purpose of loan, form of business organization, financial condition of borrower and rate of interest or discount. It is customary to include provisions in the term loan agreement providing that current financial statements be furnished the lender.

[15]American Bankers Association, Small Business Credit Commission, New York, N. Y. *Progress Report*, March 1945; "Accent on Competence," April, 1946.

[16]Institute of International Finance, New York University, *Term Loans by Commercial Banks*, p. 26.

[17]Weekly Reporting Member Banks by Federal Reserve Districts," *Federal Reserve Bulletin*, January, 1947, p. 60; Federal Reserve Bank of San Francisco, *Operating Ratios of Member Banks, Twelfth Federal Reserve District*, 1944; 1945.

[18]Marvin Bower, "Critical Factors in Passing on Term Loans," *American Banker*, December 20, 1945.

*Second*: Current regional and national business trends are studied as they affect particular classes of loans. The results of these surveys provide valuable information to bank lending officials in addition to furnishing a basis for a business advisory service to small businessmen who are potential borrowers.

*Third*: Knowledge of their loans and of business trends is used by the banks to establish and implement a term loan portfolio policy, seeking to control, within broad limits, the proportionate volumes of credit in certain lines. Effective control of term loan portfolios requires that loans be administered in a separate department of the bank, staffed by bank employees who are competent as accountants, legal advisors, industrial experts, and business counselors. Branch banks find it necessary, of course, to institute training courses for branch office personnel and to arrange for frequent visits by main office supervisory officials.

Increasing use of the term loan to small business answers the criticism that banks are abdicating their primary loan functions, and indicates that commercial banks may regain profitable business loan volume lost to competitive institutions in the 1930's. Successful administration of this growing volume of term loans to small business without adding to the costs of credit to business is a major challenge to bank management. Expanding availability of term loan credit to new and small businesses will encourage capital investment in small businesses and aid in solving their loan capital problems.

# AMERICAN SECURITY PRICE MOVEMENTS COMPARED TO FOREIGN SECURITY PRICE MOVEMENTS

*By* JACOB O. KAMM

*Baldwin-Wallace College*

## *Introduction*

The existence of an international business cycle has long been recognized. That this should be true is not surprising when it is considered that the economic conditions present in one country usually reflect the economic conditions present in other countries and also influence the conditions in other countries.[1] ". . . each phase in a business cycle, as it develops in any area, tends to produce the same phase in all the areas with which the first has dealings."[2] This has been especially true in the period in which capitalism has been the prevalent economic system throughout the world, for capitalism has emphasized international trade and investment in its extension of the division of labor concept from a regional to an international application.[3]

[1]See W. C. Mitchell, *Business Cycles, the Problem and Its Setting* (New York: National Bureau of Economic Research, 1928), Chapter IV, Section 5, for a discussion of the "International Relationships Among Business Cycles." See also J. A. Schumpeter, *Business Cycles*, vol. 2 (New York: McGraw-Hill Book Company, 1939), Chapter XIII, Section C on "The Cyclical Aspects of International Relations"; Gottfried von Haberler, *Prosperity and Depression* (Geneva: League of Nations, 1940), pp. 264-70, and Part II, Chapter XII on "International Aspects of Business Cycles"; Jacob Viner, *Studies in the Theory of International Trade* (New York: Harper and Brothers, 1937), Chapter VII, Section 5 on "The International Mechanism and Business Cycles." For a discussion of the relation of the international gold standard to the international business cycle, see R. G. Hawtrey, *The Art of Central Banking* (London: Longmans, Green and Company, 1933), p. 42.

[2]Mitchell, *op. cit.*, p. 447. Other quotations from Mitchell on this point include the following: "It is clear, however, that a financial crisis breaking out in any country of commercial importance produces financial strains in other countries, and that even mild recessions like those of 1882-83 and 1913 spread widely." (p. 439); "Further, prosperity, with its sanguine temper and its liberal profits, encourages investments abroad as well as at home, and the export of capital to other countries gives an impetus to their trade." (p. 447).

For a discussion of the international nature of the 1931 crisis, see Horace White, *Money and Banking* (Boston: Ginn and Company, 1936), p. 131, "The International Financial Crisis of 1931."

The international nature of many financial and security exchange crises has long been recognized. For example, the following statement appears in W. E. Beach, *British International Gold Movements and Banking Policy*, 1881-1913 (Cambridge: Harvard University Press, 1935), p. 136: "The security market in London was upset in May, 1901, by the refusal of some of the joint stock banks to lend after the collapse of the American stock market following the corner in Northern Pacific stock."

[3]Schumpeter, *op. cit.*, p. 666, states, "Capitalism itself is, both in the economic and sociological sense, essentially one process with the whole earth as its stage."

The development of exchange controls, clearing agreements, and various other instruments designed to insulate one economy's business fluctuations from the fluctuations of other economies which were depressing in nature was ineffective in completely excluding the international effect of business conditions,[4] except in those countries which were autarchic in nature. Even in the case of nations having a completely controlled domestic economy but not self-sufficient economy, their economic lives were largely a reflection of international developments over which they had no important influence.

The influence of the United States on the world economy, for example, is of such importance that its internal economic conditions determine prosperity or depression for many other nations in the world which depend upon the United States to purchase much of their exports.[5] "Since U. S. exports and imports accounted for about 22 per cent of world trade in the decade before the war, a depression here seeps throughout the world by osmosis."[6]

The characteristics of the international business cycle must be considered along with any statement of the existence of such a cycle. The international business cycle does not run in a similar course in any two nations considered.[7] The duration of the cycle and the beginning and the ending of the cycle differ with the different countries.[8] The intensity of the cycle also varies with the different nations. Nations having a predominantly agricultural

[4]See Paul T. Ellsworth, *International Economics* (New York: The Macmillan Company, 1938), Part II, for a discussion of tariff protection, import quotas, exchange control, clearing agreements, and similar trade arrangements.

Howard S. Ellis, *Exchange Control in Central Europe* (Cambridge: Harvard University Press, 1941), p. 115, states: "Hungarian foreign trade during eight years of exchange control to mid-summer, 1939, has been dominated by two major forces—the course of world depression and recovery, and the restriction of international trade through autarky."

On this also see Charles R. Whittlesey, *International Monetary Issues* (New York: McGraw-Hill Book Company, Inc., 1937), Chapter VI, on "Government Controls and the Theory of International Trade and Finance"; and Jacob Viner, *Trade Relations Between Free-Market and Controlled Economies* (Geneva: League of Nations, 1943), p. 92.

[5]*Cf.* Hal B. Lary and associates, *The United States in the World Economy* (Washington: U. S. Government Printing Office, 1943), (U. S. Department of Commorce, Economic Series No. 23), Chapter I, especially the section on the "Economic Weight of the United States." Also see *International Currency Experience* (Princeton: League of Nations, 1944), pp. 107-10. The following statement appears on page 107: "The economic importance of the United States is roughly indicated by the relative weight of 45 per cent attached to it in the League of Nations' world index of manufacturing production on the basis of industrial census and other data for the period 1925-29."

[6]*Investor's Reader*, New York, vol. 8 (Jan. 24, 1947), p. 5.

[7]*Cf.* Mitchell, *op. cit.*, p. 439 and p. 447.

[8]Arthur F. Burns and Wesley C. Mitchell, *Measuring Business Cycles* (New York: National Bureau of Economic Research, 1946), p. 19.

economy are affected differently than those having an industrial economy. But a rough cyclical pattern of business conditions exists sufficiently to warrant the statement that ". . . cycles really are . . . international phenomena."[9]

The most realistic assumption to make with respect to the international pattern in business cycles is, of course, that most countries tend to expand and contract together, though at different rates, and with some countries leading and others lagging.[10]

### *International Cycle in Security Prices*

Rhythmic behavior is present in many economic activities and in indexes reflecting economic activities.[11] The presence of an international business cycle suggests the possibility of an international cycle in the prices of securities on different countries' exchanges. Domestic cycles in stock prices reflecting or anticipating domestic business conditions tend to substantiate this possibility. To investigate adequately the relationship of security price movements in different countries, it would be necessary to study the price movements of securities in twenty or thirty countries. But this is an impossibility because of the limited scope of this study and because of the lack of data on security prices in many countries.[12] The analysis has thus been limited to a study, in part statistical, of security price movements in three countries, two of which are foreign, and a general analysis of security price movements in some additional countries.

### *The Relation of American and British Security Prices*

A rather thorough analysis has been made of British security price movements as compared to American security price movements. The United Kingdom and the United States represent the two largest trading nations in the world and have in the past represented the two largest international investors, although the British international investment position has been seriously weakened

[9]Schumpeter, *op. cit.*, p. 666.

[10]Arthur I. Bloomfield, "The Mechanism of Adjustment of the American Balance of Payments: 1919-1929," *Quarterly Journal of Economics*, vol. 57 (May, 1943), p. 374.

[11]Edward R. Dewey, *Putting Cycles to Work in Science and Industry* (New York: Foundation for the Study of Cycles, 1941), p. 1.

[12]See the *Statistical Year-Book of the League of Nations*, 1942-44 (Geneva: League of Nations, 1945), Table 103. Data on price movements of securities are available for 31 countries. Nineteen countries are represented with indexes carried back to 1929 but idexes of only 13 countries are carried forward from 1929 through 1944. Many indexes were suspended during the war years because exchanges were closed and indexes of security prices on over-the-counter securities were not maintained.

as a result of World War II. Because of the importance of these two countries in the economic life of other nations in the world, it was assumed that if security prices in these two countries failed to move together no economic contribution would be made by studying the security price movements of other foreign countries in relation to the United States. On the other hand if an association in the movements of security prices in these two countries were evidenced, then an extension of the study would appear logical on the basis of the relative economic weight which these countries automatically exerted on the economic welfare of other nations.[13]

The principal study of British and American security price movements extends from 1929 through 1946. The analysis has been confined to industrial shares on the assumption that the rail shares parallel the general movement of the industrial securities. It is generally accepted that a "bull" movement in security prices can rarely occur without rail securities participating with the industrial securities. This is based on the idea that national prosperity in which industrial shares are vigorously participating as evidenced by their higher prices automatically results in larger rail shipments and thus prosperity for railroads and their shareholders.[14]

The British industrial average used is the *London Financial Times* average of fifty-five industrial stocks representing shares in companies in the United Kingdom having the largest amount of capital. The average was begun in 1928 and continued through 1946.[15] The American industrial average used is the Dow-Jones industrial average of thirty industrial shares representing a cross-section of American industrial life as well as the largest companies in each important industry. The two averages used are ideal for comparison because accurate data are available on a monthly basis for the period 1929 through 1946, the two averages are averages of industrial shares, and the two averages represent the most important companies in the two countries.

The comparison between the two averages was made on the basis of the closing prices of the averages as of the end of the month. For the eighteen-year period studied the existence of cor-

[13]Countries in which the state owns and controls all industrial and productive resources and which thus have no need for security exchanges could, of course, not be included in such an analysis.

[14]Robert Rhea, *The Dow Theory* (Denver: Rhea, Greiner and Company, 1932), Chapter XII.

[15]*The Dow-Jones Averages and Supplements*—1939, 1947 (New York: Barron's Publishing Company, Inc., 1939, 1947), p. J-I.

relation was evidenced by a coefficient of correlation of .4463.[16] Analyzing the variance indicated definitely that the price movements of these two averages were associated.[17] In the fitting of a line of regression to the data the assumption was made that the British average was the independent variable and the American average was the dependent variable.[18] This was done on the basis of the statement so often made by students of market movements that the British average usually moves about one year in advance of the American average. This assumption does not alter the correlation coefficient.

A study was also made of two specific American "bull" market movements, 1932-1937 and 1942-1946. The correlation coefficient of the 1932-1937 movement is .9158 which is indicative of a high degree of association between the two stock market averages. The British average had its high and low for this "bull" movement within the same years as the American average. This movement came during the period of world-wide recovery after the world-wide depression of the 1930's. There would thus be an expectation of a high degree of association in these share indexes. The variance analysis for the 1932-1937 period also indicates a high degree of association present in the movements of the two averages.[19]

The 1942-1946 comparison produced a coefficient of correlation of .9024 indicating a high degree of relationship between the two averages.[20] In alalyzing this particular "bull" market period an attempt was made to find out whether the British industrial stock

[16]The value of r of .4463 indicates that there is some association present between the price movements of the two averages. The value of r in itself is difficult to interpret. It merely measures the elements common to both averages when a straight regression line is fitted to the data.

[17]An "F" value of 53.32 was obtained. An indication of the significance of this value is recognized in the fact that a value as large as 6.76 would only occur one time out of one hundred. The "F" value was obtained by dividing the mean square of the variation "explained" by the line of regression, by the mean square of the variation about the line of regression. The mean square in each case was obtained by dividing the respective variations by the degrees of freedom involved. Since only one degree of freedom was present in the line of regression, the mean square equaled the variation which was 147,494.5500. The degree of freedom in the variation about the line of regression was 214 which when divided into the variation of 591,940.25 resulted in a mean square of 2766.0759. By dividing the larger mean square by the smaller mean square, the "F" value of 53.32 resulted.

[18]The regression equation is $Y = 22.15 + 1.1267X$.

[19]An "F" value of 363.92 was obtained. The value of "F" at the .1 per cent level is less than 12 indicating that such a value is definitely significant at the .1 per cent level.

[20]The "F" variance value for the 1942-1946 period is 255.74. The "F" value at the .1 per cent level is about 12 indicating the fact that at this level of significance the "F" value represents a definite relationship between the movement of the two price averages.

prices moved in advance of the American industrial stock prices. The resultant coefficient of correlation is .9135.[21] This coefficient was obtained by lagging American industrial stock prices one year behind the British industrial stock prices. As indicated, a slight increase in the association was obtained. This indicates, if anything, that the British industrial average does not lead the American industrial average to an extent sufficient enough to be used as a forecasting device for American industrial share movements. In making the analysis of the lead and the lag of the two averages, a chart of the two averages was analyzed and the most logical period from the viewpoint of a lead in the British average over the American average was selected.

The small increase in the coefficient when considered in conjunction with the period selected would seem to warrant the conclusion that the British industrial average does not lead the American industrial average. This is supported statistically in the analysis of the difference in the correlation coefficient which follows.

By transforming the coefficients of correlation to Z's and then testing the difference between the Z's, it is possible to find out whether the different r's are from the same population or not. When this method of analysis is applied to the above r's, it is found that the difference between the coefficient of correlation for the seventy-two month period 1932-1937 and the coefficient of correlation for the sixty-month period 1942-1946 is not significant.[22] The difference between the coefficient of correlation of the British and American stock averages for the sixty-month period 1942-1946 and the coefficient of correlation for the same averages when the British average leads the American average by one year is also not significant.[23]

A comparison of the coefficient of correlation for the 216-month period 1929-1946 with the coefficient of correlation for the sixty-month period 1942-1946 yields, however, a difference which is sig-

[21]The "F" variance value for the period when the British average with a lead of one year was correlated with the American average is 292.04. This again is indicative of a definite relationship between the movement of the two averages during this period. Selection of another period when one of the averages moved in a direction opposite to the trend of the other could change these results.

[22]When the difference in the sample Z's is divided by the standard error of this difference, the U value obtained is .4513. Since U at the 5 per cent level of significance would be equal to 1.96 standard errors, it can readily be seen that this difference cannot be regarded as significant and the hypothesis that the two samples are from the same population cannot be refuted. A difference of .4513 could have occurred as a result of chance.

[23]In this case the value of U is .3654 standard errors.

nificant at the 5 per cent level but one which is not significant at the 1 per cent level of significance.[24] At the former level the hypothesis that the two correlation coefficients come from the same population is not refuted. This hypothesis is, however, refuted at the 1 per cent level. It is apparent, therefore, that these two r's have a greater probability of coming from different populations than the r's considered above.

If one accepts the one-tenth of 1 per cent level of significance as indicating whether or not there is a definite relationship between the British and American security prices, one would have to conclude that there is a direct relationship present between the two averages from the view of the co-variance. This means that as British industrial security prices are rising, American security prices are also usually rising. It seems probable that if the analysis were extended to include the British rail average price movement as compared to the American rail average price movement similar results would be obtained as have been for the study of the industrial averages of the two countries. Since the movement of the rail security price average usually parallels the the movement of the industrial average of the same country, as a glance at Chart 1 indicates, the above statement does not seem to be unwarranted.

It is necessary to consider the explanation of why the coefficients of correlation for the subdivisions of the eighteen-year period analyzed are so large in relation to the coefficient of correlation for the entire eighteen-year period. A scatter diagram for the 216 months in the analysis seems to reveal the explanation for this difference. Each "bull" movement upward and each "bear" movement downward evidenced a close association without a large amount of scatter, but since these "bull" and "bear" movements each followed different paths, the final scatter around one line of regression for the 216 months was rather large. Actually the correlation of each separate "bull" market and each separate "bear" market is probably the best method of analysis of the relationship of the two averages.

*The Relation of American and Canadian Security Prices*

Establishment of a definite association between the American and British stock prices would indicate that a similar association would be present between American and Canadian security price

[24] A value of U equal to 2.1280 was obtained. This exceeds 1.96 standard errors and thus is a significant difference if the 5 per cent level of significance is accepted as the level of significance. At the 1 per cent level of significance, this value would be less than 2.57 standard errors of the difference in the Z's and thus would not be regarded as significant at that level.

movements. Using only annual data and limiting the analysis to the period 1940 through 1946, a coefficient of correlation of .9916 was obtained.[25] The high degree of association bears out what any student of security price movements would expect.[26] The close interdependence of the Canadian economy with the American economy; the across-border security trading by both Americans and Canadians; the same type of economic system present in both countries: all these factors lead to an expectation of a high coefficient of correlation, one which logically is higher than was obtained in the analysis of British and American security prices.[27]

There is thus sufficient evidence from a statistical viewpoint to warrant the conclusion that American security prices are related to both the British and the Canadian security price movements.[28]

*Relation of Security Price Movements in the United States with Security Price Movements in Other Foreign Countries*

Security price movements in the Scandinavian countries (other than Sweden) tended to parallel the movement of security prices in the United States prior to the World War II period. The "bear" market lows following the 1929 crisis were all recorded in 1932. The "bull" market highs following 1932 were all recorded in 1937. With the outbreak of war, the averages among these countries diverged. Finnish stock prices rose throughout the war because of inflation. Norwegian security trading was suspended. Danish security prices also represented inflationary forces. Swedish prices moved more closely with American prices.

Japanese, German, Czechoslovakian, Australian, and New Zealand security prices tended to move in similar patterns to that formed by American security price movements. But the Central

[25]The American stock average used was the Standard and Poor's common stock average. The Canadian average used was also a common stock average. Both averages are to be found in the *Federal Reserve Bulletin*.

[26]In analyzing variance an "F" value of 337.58 was obtained. At the .1 per cent level of significance an "F" value of 47.04 is found, indicating that if this level of significance is accepted, as it usually is by statisticians as the level of significance, the relation between American and Canadian security prices is definitely significant. The probability of an "F" value as large as 47.04 is only one time out of a thousand, and the probability of an "F" value of 337.58 occurring is even less.

[27]In this analysis of relationship between the stock price averages of the two countries, the American price average was made the independent variable instead of the dependent variable as in the preceding case.

[28]When the coefficient of correlation of the British and American stock averages for the sixty month period 1942-1946 and the coefficient of correlation of the Canadian and American stock averages for the seven year period are transformed to Z's and the difference in these Z's compared, it is found that the difference is not significant at the 5 per cent level of significance.

and South American countries, France, Hungary, and Portugal followed different patterns.[29]

The outbreak of war caused security price movements in many countries to diverge. The following quotation taken from the "Annual Report of the Bank for International Settlements" for the year ending March 31, 1941, indicates the lack of common forces present in all the European countries.

The outbreak of the war and the military events of 1940 have not left the stock exchanges unaffected, though in this field the divergence between the tendencies in different countries has been remarkable. Valuations of capital assets, which in normal times largely reflect movements in current profits and interest rates, tend under present conditions to be based on more or less uncertain anticipations as to developments in the years to come.[30]

Security price movements in the Netherlands tended to follow the American security price movements up to the 1940's when a divergence occurred, largely as a result of the inflationary forces at work within the Netherlands. The Dutch common stock average based upon 51 stock issues reached its low in 1932 the same year as did the stock average in the United States. It reached a high in 1937 in which year the United States average also reached a high. Following 1937, Dutch security prices plotted a downward movement into 1939 after which the "flight from the guilder," as a result of the domestic wartime inflation, carried security prices to levels over 45 per cent higher than in 1929.

The Amsterdam Stock Exchange was closed May 10, 1940, but was reopened for trading in government bonds in July, 1940. Gradually other securities were permitted to be traded including American shares. On April 1, 1941, exchange restrictions were abolished between Germany and the Netherlands permitting German purchases without any restrictions. This latter action accounts in part for the rise in security prices which occurred so rapidly from 1941 through 1944.[31] The Amsterdam Stock Exchange was closed in the latter part of 1944 and was not reopened until the beginning of 1946. Since its reopening stock prices have plotted a pattern similar to that formed by movements of American security prices although admittedly the period has been too short to draw

[29]See the *Statistical Yearbook of the League of Nations*, 1942-1944 (Geneva: League of Nations, 1946), Table 103.

[30]"Annual Report of the Bank for International Settlements," *Federal Reserve Bulletin*, vol. 27 (Nov., 1941), p. 1131.

[31]*Ibid.*, p. 1132.

any definite conclusions concerning mutual forces at work. Since its reopening the Amsterdam Stock Exchange has had only limited activity largely because of the government restrictions on trading.[32]

Security price movements in Switzerland tended to follow the American pattern until 1937 after which the Swiss pattern diverged. Since the end of World War II, however, the Swiss security price movement seems to have fallen in step with the American security price pattern. At the end of 1945 the Dow-Jones industrial average was 192.91 while the Swiss National Bank stock average was 204. By mid-July, 1946, the Dow-Jones industrial average stood at 200.86 while the Swiss National Bank stock average was 241.[33] In September, 1946, the Dow-Jones industrial average fell to a low of 165.17 in the first thirteen trading days of the month. This low was exceeded in October when the industrial average reached 164.21 and also in November when the average reached 163.55. The international importance of the New York Stock Exchange is illustrated in the following statement:

> Following the rise in prices and the increase in the turnover of the Stock Exchange in spring 1946, the holiday season has brought about as usual, a certain lull, causing irregular prices and a low in the turnover. The break in prices, witnessed on the New York Stock Exchange in September, has found Swiss Stock Exchanges rather resistant at first, and only towards the end of September has a weaker tendency set in. The share average has receded from 241 at the end of June to 224 in the middle of October. Since then it has recovered to 231.[34]

At the beginning of February the Dow-Jones industrial average had risen to 180.88 and the Swiss National Bank stock average had risen to 247.[35]

Thus in a general sense the Swiss stock market can be said to be following a pattern which is in many respects similar to that formed by American security prices although admittedly any definite statements as to the statistical relationship between the security price patterns of these two countries would require a thorough analysis of statistical data, an analysis which is beyond the scope of this study.

[32]H. Mainz, *The Economic Situation of the Netherlands at the End of* 1946 (Amsterdam: H. Mainz and Company, 1946), pp. 61 ff.

[33]"Stock Exchange," *Swiss Facts and Figures*, Union Bank of Switzerland, New York, (Sept., 1946), pp. 1 and 2.

[34]"Stock Exchange," *Swiss Facts and Figures*, Union Bank of Switzerland. New York, (March, 1947), p. 2.

[35]"Stock Exchange," *Swiss Facts and Figures*, Union Bank of Switzerland, New York, (March, 1947), p. 2.

*Conclusion*

(1) The existence of a similar pattern among movements of security prices in different countries seems to be roughly true when an analysis of such movements is limited to security prices in free-market countries.[36]

(2) The international forces at work affected British industrial security prices in about the same manner as they affected American industrial security prices. British security prices moved in a pattern similar to that made by American security prices in spite of rigid financial controls in operation in the United Kingdom. The fact that the British "bull" market started one year earlier than did the American rise is probably in part due to the British liquidation of American securities in 1940 and 1941.

(3) Security prices in those countries which were overrun by the enemy during the war reflected the wild inflationary forces at work instead of international conditions. Local forces dominated the pricing process.

(4) Where countries are completely controlled by the state and private property is non-existent as, for example, the U.S.S.R., security exchanges are non-existent and thus no association could be present. In the United Kingdom where many industries have been socialized, the British rail average has been discontinued and the British industrial average has been revised; but since the socialization has occurred, British security prices have continued to follow a pattern which American security prices have paralleled.

(5) The analysis of security price movements strongly suggests the existence of an international security cycle among the larger trading nations of the world, a cycle operative in each nation engaged in large-scale international trade except under unusual circumstances such as domestic hyper-inflation.[37] If one does exist, it will probably have its basis in an international business cycle, or perhaps on general anticipations of such a cycle, since security prices have a notable record for moving in advance of changes in business conditions.[38] Furthermore, if an international security exists, then varying durations of national security price move-

[36] *Cf.*. J. Edward Meeker, *The Work of the Stock Exchange* (New York: Ronald Press, 1930), p. 504.

[37] See Fritz Machlup, *The Stockmarket, Credit and Capital Formation* (New York: The Macmillan Company, 1940), p. 163, for a discussion of the way in which a business cycle spreads from one country to another via the stock market.

[38] *Cf.* Charles A. Dice and W. J. Eiteman, *The Stock Market* (New York: McGraw-Hill Book Company, 1941), p. 359.

ments, differing intensities of the movements, varying leads and lags, will all be present.[39]

Whether or not an international security cycle exists cannot be specifically answered from the study, but the association evidenced among the price levels of securities in the countries studied does indicate the existence of international forces at work in the determination of security prices.

[39]The writer has leaned more toward the assumption that if cyclical security prices are present in an international pattern, they are the result of international rather than universal forces. On this see Bloomfield, "The Mechanism of Adjustment of the American Balance of Payments: 1919-1929," p. 372.

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Published by the American Finance Association

MARSHALL D. KETCHUM, Editor
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THE JOURNAL OF FINANCE is sent to all members of the Association, as one of the privileges of membership. The dues of the Association are $5.00 per year.

Correspondence relating to membership in the American Finance Association and other business matters should be addressed to the Secretary-Treasurer, Edward E. Edwards, School of Business, Indiana University, Bloomington, Ind.

Communications relating to editorial content of THE JOURNAL should be addressed to the Editor, Marshall D. Ketchum, School of Business, University of Chicago, Chicago 37, Illinois. Correspondence relating to advertising in THE JOURNAL should be addressed to the Advertising Manager, J. Rogers Flynn, Jr., 630 Fifth Avenue, New York 20, N. Y.



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# ANNUAL MEETING OF THE AMERICAN FINANCE ASSOCIATION

December 28-29, 1948

CLEVELAND, OHIO

TUESDAY, DECEMBER 28

*Morning Session:* (joint session with the American Economic Association)

*Topic:* Postwar Monetary and Credit Policies

*Chairman:* Ray M. Gidney, President, Federal Reserve Bank of Cleveland

*Papers:*

Postwar Exchange Rate Policy:
Frank D. Graham, Princeton University

Postwar Commercial Bank Lending Policies:
William E. Dunkman, University of Rochester

Postwar Federal Reserve Policy:
Charles C. Abbott, Harvard University

*Discussion:* R. J. Saulnier, Barnard College, Columbia University; John H. Wills, Northern Trust Company, Chicago, Illinois.

*Luncheon Session:* (Joint session with the American Economic Association)

*Address:* The Management of the Public Debt:
Winthrop W. Aldrich, Chairman of the Board, Chase National Bank, New York City

*Afternoon Session:* (Round Table)

*Topic:* Effects of Federal Personal and Corporate Income Taxation on American Business Finance

*Chairman:* Neil H. Jacoby, University of California, Los Angeles

*Papers:*

Effects on the Expansion of Business Assets. Sergei Dobrovolsky, Wayne University

Effects on Dividend Policies and the Internal vs. External Financing of Expansion in Assets:
Keith Butters, Harvard University

Effects on the Forms and Methods of External Financing Used by Business
Paul Howell, New York University

WEDNESDAY, DECEMBER 29

| | |
|---|---|
| *Morning Session:* | (Round Table) |
| *Topic:* | The Teaching of Money and Banking |
| *Chairman:* | R. J. Saulnier, Barnard College, Columbia University |
| *Participants:* | Charles C. Abbott, Harvard University<br>Howard R. Bowen, University of Illinois<br>William E. Dunkman, University of Rochester<br>E. A. Goldenweiser, The Institute for Advanced Study<br>Fritz Machlup, Johns Hopkins University<br>Roland I. Robinson, Northwestern University |
| *Afternoon Session:* | (Round Table) |
| *Topic:* | Current Investment Tendencies — Their Direction and Significance |
| *Chairman:* | Kennth L. Trefftzs, The University of Southern California |
| *Papers:* | Current Tendencies in Institutional Investments—Their Direction and Significance:<br>Fergus J. McDiarmid, Vice-President, Lincoln National Life Insurance Company<br>Current Tendencies in College Investments —Their Direction and Significance<br>J. Parker Hall, Treasurer, The University of Chicago<br>Current Tendencies in Commercial Bank Investments — Their Direction and Significance:<br>J. Brooke Willis, Columbia University<br>Current Tendencies in Individual Investments—Their Direction and Significance<br>Paul L. Morrison, Northwestern University |
| *Discussion:* | W. J. Eiteman, University of Michigan |
| *Afternoon Session:* | Business Meeting of the American Finance Association |

# THE FLOW OF SAVINGS—*I**

*By* HOMER JONES

*Committee for Economic Development*

## *Introduction*

One of the most important features of our economic life is the character and use of savings. As we here conceive of savings, they consist of three parts. Individuals choose to consume less than their income. Corporations retain a portion of their earnings. Governments sometimes make repayments of their debts. The rate of total net saving and the rate of each of these categories of saving are in a constant state of flux. Changes are continually taking place, not only in the amount of saving, but in the proportion of national income saved.

A prime essential feature of savings is that they must be used. The chief normal use of savings is to increase the stock of economic goods or wealth of the economy. A second possible disposition of savings is through net increases in the debt of government, irrespective of the extent to which the government is increasing its holdings of economic goods. A further outlet is found in the acquisition by our citizens of foreign securities and economic goods located abroad. Savings and their uses may be conceived of somewhat differently from the treatment here used, but it is thought that this conception is useful and conforms to most readily available statistics.

A successful private enterprise economic system must on the whole provide that the rate of net increase in the stock of capital goods or wealth corresponds to the rate of saving.[1] They must be adjusted to each other, indeed equated. If the economy undertakes to accumulate capital goods at a rate less than the rate of saving, there will not be sufficient demand for total production and income will fall. If we attempt to increase our stock of capital at a greater rate than the rate consistent with our propensity to save, inflation will ensue. For us to have high production and income the public must be willing to buy capital goods at the same rate at which they desire to save under such conditions. One may

* This article is based upon papers presented at the 1948 session of the Life Officers Investment Seminar held at Lake Geneva, Wisconsin, from May 23 to June 4. However, the Financial Section of the American Life Convention, which sponsors the Seminar, is not necessarily in agreement with the ideas presented herein.

[1]Government deficits at times constitute an offset to savings. Some believe they can be a more or less permanent or normal offset. The view is here taken that they cannot be a large normal feature of a successful private enterprise economy.

think of the problem as one of assuring that the rate at which we wish to increase capital is adjusted to the rate at which we wish to save. Or it may be thought of as one of adjusting saving to the rate of capital formation. Some observers think of the rate of needed or profitable capital formation as fairly precisely limited. From this standpoint it is necessary that the mechanism of adjustment assure that the rate of saving not be excessive. Others look upon the problem primarily as one of assuring that the rate at which people are willing to buy capital goods corresponds to the rate at which saving takes place at high employment. They feel that the profitable uses of additional capital goods are very extensive, and that the acquisition of such goods can be adjusted to the rate of saving. Without any prejudice as to which of these points of view may have the greater merit, we shall here for the most part assume the rate at which people wish to save as given and consider some of the problems of achieving a rate of capital formation equal to the high employment rate of saving.

The problem of satisfactorily equating the rate of saving and the demand for new capital goods has two important aspects. The first is the broad static problem of equating the supply of savings and the demand for capital which we have just discussed. But the problem is complicated by the rather erratic behavior of both the supply of saving and the demand for capital. When we have these two factors equated at a level consistent with high production, the pertinent basic conditions do not remain fixed. If the propensity to save changes, maintenance of high production and stable prices requires that the additions to the stock of economic goods shall change correspondingly. But the factors which change the propensity to save do not automatically change the demand for capital in the same direction. On the other hand anticipations of capital productivity may change without corresponding changes in propensity to save.

This problem of getting an appropriate matching of saving and capital formation is a major aspect of business depressions and inflations. As a demand for capital goods low relative to the propensity to save causes a decline in production, so a relatively excessive demand for capital goods causes inflation.

The traditional mechanism which has been assumed to equate savings and the capital goods increment at a rate consistent with high production is the rate of income received from capital goods, i.e., the interest rate. Most simply conceived, a high interest rate encourages saving and discourages borrowing, a low interest rate

discourages saving and encourages borrowing, so that some intermediate rate is consistent with an equilibrium. A high rate of return on equity capital will encourage both savings and capital formation.

It is obvious that operating through our institutional structure interest rates have been far from successful. They have not been able to equate savings and capital formation at a rate consistent with tolerably stable high production and employment. But plans for a prosperous free enterprise economy should make the utmost use of the interest mechanism. We need to take steps to revive interest rates as a price equating savings and capital formation at a level consistent with high production.

There may be public policies which can supplement the interest rate in equating savings and investment at an appropriate level. Taxes and public expenditures may affect the rate of saving and the rate of private capital formation, either desirably or undesirably. If savings tend to be below the rate of capital formation, a government surplus and repayment of debt will tend to correct the situation. If the demand for capital is low relative to the propensity to save, an excess of government expenditures over tax receipts and a consequent net borrowing by government will provide an outlet for savings. This use of the government exchequer to increase the supply of funds available for private capital formation or to provide an outlet for savings is a major aspect of fiscal policy.

There is little agreement, however, on how fiscal policy can be used to equate savings and investment at an appropriate level. Many commentators do not believe that it is an appropriate instrument for the purpose at all. Is it so clumsy a tool that declines in production or increases in prices may proceed intolerably far before adjustment may be made? And may this clumsy tool make for gross over-adjustment? Is there any possibility of the tool being set up to operate in a substantially automatic manner? Or must positive political action be continually taken in order for it to work satisfactorily? I state these questions not to answer them, but to show that while fiscal policy may help in control of the flow of savings, it is not a proven reliable device.

The most erratic feature in the savings-investment equation seems to be the demand for capital goods. Equity investment and borrowing of money for investment are guided largely by anticipations of profitable use for additional real capital. The most promising avenue for keeping within reasonable bounds the equat-

ing job which must be done by the interest rate, the fiscal device and other mechanisms, is to achieve a reasonable stability of expectations regarding the profitability of additionally formed capital.

### *The Mechanisms for Saving*

While they may not be the most important aspect of the flow of savings into capital formation, I wish to examine primarily certain institutional features of the flow. We have been doing so badly with the savings-investment problem that we should leave no stone unturned in seeking a solution.

It is important to distinguish between the concept of saving, which we have been discussing, and that of gross saving. Gross saving includes, in addition to the savings which we have heretofore discussed, the depreciation funds which are available for replacement of capital goods. Economic stability is also dependent upon reinvestment of these depreciation funds. Gross capital formation including replacement, must be equated with gross savings, including depreciation funds at an appropriate level. But while the reinvestment of depreciation funds is a most important aspect of maintenance of stable high employment, this discussion will be limited to the flow of net savings.

In prosperous peacetime years, savings have been of the order of magnitude of 10 per cent of the national income. Personal savings in prosperous years of the past two decades have been about 5 per cent of national income. What these relationships would be in a stable prosperous economy is problematical. I am inclined to believe that under such conditions personal savings would constitute a somewhat larger portion of total savings, as was the case in the 1920's.

The retained earnings of corporations in a sense offer the least problem in achieving an appropriate equating of savings and capital formation. Retained earnings are for the most part used directly to add to the stocks of economic goods held by the corporations concerned. They present no institutional problem of flow.

Government savings may take the form of building up cash balances or of repayment of debt. If government builds up cash balances, the banks must be enabled to expand correspondingly if the savings-investment flow is to be maintained. The investment problems are those of the commercial banks.

If government repays debt there are three chief avenues which the repayment may take; namely, to individuals, to corporations

and to intermediary financial institutions. The process of investing those savings, which consist of government debt repayment to corporations, would seem to be quite comparable to the investment of retained corporate earnings. Savings in the form of government debt repayment to individuals merge with the flow of personal savings into investment.

If the intermediary institutions behave neutrally they will increase advances to the private segment of the economy corresponding to repayments of government debt which they hold. Accordingly, their receipts from government debt redemption constitute a flow of savings comparable to the flow of savings of individuals to them.

We come then to the nucleus of our discussion, the flow of personal savings into capital formation. Personal savings are far from a simple and straightforward concept. In the most commonly available statistics they include the retained earnings of unincorporated businesses, as well as savings from salaries and other savings, which are more commonly thought of as personal savings. They include the savings out of income from trusted funds, foundations, endowments, etc.

From one standpoint the data on personal savings understate the amount of such savings. In the case of very closely held corporations the distinction between savings of individuals and corporate savings is entirely formalistic. In a sense all savings are personal savings, corporate savings being pro rata savings of the corporate stockholders. But the rough distinction between corporate savings and personal savings is a useful practical distinction. It is personal savings which seek an extremely high degree of safety and flow primarily into the intermediary institutions.

In considering the problem of a flow of savings into formation of capital we are of course primarily interested in the future. But we look to the record of the past for some indication of forces which will operate in the future. The record concerning personal savings is most complete for the period 1929 to date. But those years may not be very useful for giving an idea of the problem of future savings flow. The period covered is one of protracted depression, of war and of postwar maladjustments. The record may not throw much light on the nature of the flow under conditions of stable high employment. Neither may it be of much use in understanding a situation of great political, military, and inter-

national uncertainty. However, used with discretion, the data of the past may throw some light on the problems of the future.

We may distinguish three chief uses which individuals may make of savings if they are to flow into private capital formation. 1. They may acquire capital goods and equities in corporations. 2. They may acquire the fixed dollar obligations of corporations or other individuals, who in turn will acquire real capital. 3. They may hold their funds in the form of cash or the obligations of intermediary financial institutions, such as banks, savings and loan associations and life insurance companies.

The extent to which savings flow into the intermediary institutions is one of the most significant aspects of the savings-investment process. It is necessary that these institutions make funds directly or indirectly available for capital formation at the rate at which the public wishes to place funds with them.

The data available to us seem to indicate a great propensity for individuals to increase their holdings of cash and fixed dollar liabilities of the intermediary institutions. For want of a better term, such disposition of funds is here designated as passive savings.[2] Included in this concept is investment of individuals in securities of the U. S. Government, the states and their subdivisions. Insofar as government securities are not on net available this money is of a type which on the whole will go into the intermediary institutions.

In the period 1935-47 inclusive, passive disposition of funds or passive savings have amounted to more than the total volume of personal savings. An analysis of passive savings based on data of the S.E.C. and total personal savings as computed by the Department of Commerce shows that in 11 out of 13 years passive savings exceeded total personal savings. This may be due in part to inadequacies of the data. However, the situation indicated by the data is perfectly possible. If individuals sell bonds and put the proceeds in banks while the banks buy the bonds there will be a contribution to passive savings in no way related to net personal savings. But this possibility in no way reduces the significance of these figures for our purposes. They illustrate the extent of the investment burden which is thrown up-

[2]The concept of "passive savings" here used is not identical with the "liquid savings" concept of the Securities and Exchange Commission. (See *Survey of Current Business*, July, 1947, Supplement, Table 6, p. 20). "Passive savings" excludes investment in corporate securities, reduction of housing debt by individuals, and increase in government insurance and pension reserves.

on the intermediary institutions. These institutions must invest an amount equal not only to the total savings of individuals but something more.

In the period 1935-47 as a whole net passive saving by individuals amounted to 111 per cent of total personal savings. Only in the years 1937 and 1947 did personal savings exceed passive disposition of funds by individuals.

Apparently this propensity of individuals to place a great portion of their available funds in liquid fixed dollar assets antedates the Great Depression. In the period 1920-29 while individuals other than entrepreneurs saved $39 billion, funds flowed to the financial institutions to the extent of $26 billion. A further but undetermined portion of their funds no doubt flowed into cash and demand deposits. From the beginning of 1920 to the end of 1929, savings in the life insurance companies increased 155 per cent; in the mutual savings banks, 79 per cent; in the savings and loan associations, 327 per cent; and in savings departments of the commercial banks, 105 per cent. The mortgage holdings of the life insurance companies increased 249 per cent; and those of the commercial banks increased 137 per cent. Since individuals probably acquired large amounts of mortgages and bonds, it would appear that only a small proportion of individual savings can have gone into equities.

If savings flow into the intermediary institutions it is necessary that the institutions in turn make these funds available for capital formation. Customarily the institutions have made their funds available only through the instrumentality of debt. For the most part they are required by law to confine their assets to fixed dollar obligations of highly reliable borrowers.

### *The Debt-Equity Ratio*

One of the important problems connected with the flow of savings is the extent to which they take the debt as compared with the equity form. During the 13-year period 1935-47 the $182 billion of passive savings of individuals compared with $30 billion of net retained corporate earnings. But sound debt depends upon substantial equities. As a normal thing increases in debt must be balanced by increases in equity. The relationship between debt and equity which is sound probably is a very broad range rather than any very precise point. Some debt, particularly some short-term debt, is an important and indeed indispensable part of a private property price economy.

The dangers of excessive debt are to be found in two connections. First, if debt increases at a greater rate than equity, a point may be reached where creditors will no longer be willing to make loans at the rate necessary to maintain high production. Second, a business recession starting from whatever cause will emphasize the burden of debt charges, maturing debts will cause embarrassment, incurrence of further debt will be difficult, investment will be further impeded and recession further promoted.

A high relationship of debt to equity leads to government support of the debt structure and in turn to further government participation in the economic process. The high relation of debt to equity in real estate at the end of the 1920's led to the H.O.L.C. The H.O.L.C. was the ideological forerunner of government guarantee of housing loans, which led to guarantees to the extent of 100 per cent of the value of the property. Thus, high debt-equity ratios lay the groundwork for *de facto* government ownership and operation. To the extent that high and increasing debt-equity ratios impede the flow of savings and prevent maintenance of production, government will no doubt take over responsibility for investment and supersede private enterprise.

Equity funds may flow into some fields in an adequately high relation to debt yet be inadequate in other fields. Equity seems to have been particularly lacking in the field of housing and other rental construction during the past three decades. An inadequacy of equity funds in some important field such as housing may produce a maladjustment and underproduction even though in other fields equity funds are available in reasonable relation to debt funds.

Equity funds from retained earnings are not necessarily distributed among industries and firms in proper relation to future earnings prospects. New investment is needed where future earnings prospects are greatest, but in terms of magnitude this may not be where the current earnings are to be found. Adequate equity funds must be available for the fields of greatest future prospects. There must be means whereby equity funds can flow into new fields other than by means of retention of earnings. The equity funds flowing into new fields need to be exceptionally high in relation to debt because of the greater uncertainties connected with new undertakings.

The considerations just outlined are calculated to show that it is quite possible that such a large proportion of savings may seek to

flow into the debt form that the economic process will be greatly impeded. I believe that the proportion of savings seeking the debt form either directly or through the intermediary institutions has been and will be so large that the savings-capital formation process is greatly harmed. Otherwise stated, stable high production would be promoted if a greater proportion of savings could flow directly into capital formation and into corporation equities.

Individuals and institutions can find sound housing debt, other than that guaranteed by the government, only to the extent that a reasonable amount of equity money is flowing into the same projects. Savings can be invested soundly in office buildings, loft buildings, theaters and other commercial rental real estate only if there is a reasonable amount of equity money flowing into the capital formation. The same statement applies to the public utilities and to every other segment of private capital formation.

How then can we get a greater flow of savings into equities? In part the disposition of savings is a function of who does the saving. Insofar as corporate saving is particularly available for equity investment, public policies designed to increase corporate saving may be conducive to more equity investment. Insofar as the wealthy are more inclined to invest in equities than are the lower income classes any public policies which will increase the proportion of total saving done by the higher income classes will be conducive to greater equity investment. In other words, the more unequal the distribution of saving the greater the possibility of adequate equity investment. Presumably the greatest contribution to inequality of saving is inequality of income. Some reforms which might be conducive to greater inequality of income are the same as those which would increase the propensity of the wealthy to invest in equities, e.g., reduction of taxes on higher incomes.

As we have seen, it appears that a very large portion of the savings of the country are destined to flow into the intermediary financial institutions. It seems problematical whether the economy can normally generate enough private high grade debt to accommodate the funds flowing to the institutions along with any savings which may be used directly to acquire high grade debt. Aside then from the possibility of changing the distribution of saving, what are the possibilities for increasing the proportion of savings flowing into equities?

Unless one or both of these avenues can be greatly expanded, we run great danger of being dependent on government deficits and

capital formation as outlets for saving. Radical reform of the private financial system is far preferable to dependence on government investment. The former is the avenue consistent with survival of the free enterprise system.

As I see it there are two chief possibilities for bringing about a satisfactory high rate of equity investment. The one possibility is for individuals to invest in equities at a substantial rate. The other is for the intermediary financial institutions, to which so great a proportion of our savings seem destined to flow, to invest substantially in equities.

### *Increasing Equity Investment by Individuals*

What are the prospects for substantial direct equity investment by individuals? Will they invest in equities in owner-occupied housing? In other rental real estate? In unincorporated business? In corporate stocks? The answers to these questions are either very complicated or not available. Nevertheless, it may be worth while to mention a few factors bearing upon them.

### *Equity Investment in Housing*

Data compiled by the Securities and Exchange Commission give some indication of the flow of individual savings into housing. The data indicate that in the thirteen years, 1935-47, individuals made a net disinvestment in housing of $5.6 billion.[3] This figure includes both owner-occupied housing and rental housing. It includes both equity investment and loans by individuals to the owners of hous-

[3]Data computed from estimates of the Securities and Exchange Commission, presented in *Survey of Current Business*, July, 1947, Supplement, Table 6, p. 20, and July, 1948, Table 6, p. 17. These estimates for investments by individuals in housing, unincorporated business, and farming are of necessity rather crude. For particular years they do not prove out with the Personal Saving estimates of the Department of Commerce and the Liquid Saving of Individuals estimates of the S. E. C. Nevertheless, they do appear to be sufficiently reliable to support the general conclusion here developed. Passive savings of individuals (as here defined) are somewhat larger than total personal savings. The independent estimates of active savings (as here defined) are, more often than not, negative. Therefore the estimates of passive saving and active saving roughly check. The estimates of the items constituting passive saving probably are quite accurate. Therefore, if the statistical record of negative saving in the field of housing, corporate securities, farming and other unincorporated business is on the whole incorrect, it must mean the data concerning total personal savings are correspondingly in error. Possibly there are underestimates in the savings data, but I believe they cannot be so great as to mean that the figures we are considering cannot be used for our rough purposes. It may be objected that the period covered is primarily one of depression and of war, and that the record for these years does not indicate what might happen in prosperous peacetime years. However, the most prosperous peacetime years of the period covered seem to show no different tendency from the others.

ing. At first glance this negative figure may not seem plausible. But we must remember that disinvestment in active forms is a necessary corollary of the excess of passive savings over total personal savings.

The supply of housing services in this country has fallen into three catagories. Something more than a third of the urban housing has normally been owned by the occupants.[4] About 50 per cent has been rental housing owned in small blocks by persons of moderate means. The remainder of urban housing has consisted of rental space in rather large blocks, presumably, on the whole, owned by the relatively wealthy. Distribution of "ownership" or title does not tell a great deal about the process of the flow of savings into capital formation in the field of housing. Even though the nominal ownership of housing may be in the hands of individuals there may be little flow of individual savings directly into housing. In the 1920's there was a great capital formation both in the form of owner-occupied housing and in the form of rental housing. But this did not necessarily mean that much personal savings went into housing in the equity form. There is reason to believe that the net investment in housing in the 1920's was financed almost entirely by increases in mortgage debt. It would seem that neither in the 1920's nor in the period 1935-47 did the savings of individuals flow substantially into housing equities.

Housing ownership by the occupants as opposed to renting has possibly been promoted by the lax lending standards of the 1920's and by the government guarantee of housing loans beginning in the 1930's. Owner-occupancy has been further stimulated by rent controls. But none of those influences has promoted equity investment. Indeed they have operated in quite the opposite direction. Rent controls have on the whole caused the sale of housing by persons with substantial equities to persons with small equities. Allowance of interest costs as deductions in computation of personal income taxes have probably contributed to home ownership, whether desirably or not may be debated. But these deductions have been detrimental rather than helpful to the equity element in housing.

If savings have not flowed into equity in housing in the past thirty years, the prospects seem to be even more dreary now. All the property tax factors which have made equity investment in

[4]Source: Housing and Home Finance Agency, *Housing Statistics Handbook*, pp. 47, 60. There seems to have been no secular trend from 1890 to 1940 in the proportion of non-farm housing which was owner occupied. The proportion increased in the twenties and declined in the thirties.

real estate unattractive operate unabated. The income tax considerations which have made venture investments unattractive, particularly to the relatively wealthy, now operate *a fortiori*. The atmosphere of rent control which has come to permeate the nation militates strongly against any equity investment in rental housing. If owners of housing are to be deprived of the profits which occasionally flow from high demand they can scarcely be expected to undertake the risks of loss which may flow from low demand.

Government supply of housing and guarantees of loans to the extent of a large proportion of value reduce the chance of equity investment in housing. Savers will scarcely take the risks of housing for a net anticipated return equal only to the interest on government borrowings. Even if investors anticipate that on the whole they could receive rents greater than those on the yardstick properties of government, they will hesitate to incur the social disapprobation involved.

House occupants will find the nominal ownership of housing financed largely by government guaranteed loans preferable to rental. The net capital cost of the housing financed by government guaranteed debt is the interest on government borrowing. In order for privately financed rental housing to compete it would seem that rentals would have to be such as to give a net capital return only equal to the interest on government borrowing. But in this case savers will surely prefer to invest in government securities rather than to take the risks of housing ownership. Indeed, to compete, the rental property would have to bear rentals which would yield less to capital than the return on government securities. Under the nominal ownership of housing financed by government guaranteed debt, the occupant not only gets the use of space at a net capital cost equal to the return on government securities; he also gets a chance at a windfall if the costs and price of housing rise. To compete, rentals would have to be low enough to yield a return on capital less than the interest on government securities. It thus appears that government housing and government guarantee of housing debt or the anticipation of them preclude much possibility of equity investment in rental housing by individuals in the future.

Substantial flow of savings into housing equities would require a complete reversal of the trends of thirty years or more. Extensive reforms of both property and income taxation would be necessary. Savers would need in some miraculous way to be disabused of the idea that rent controls, government housing, and

government guarantee of housing loans will be significant features of the economic system of the future.

*Corporate Equities*

We actually know very little about the flow of personal savings into corporate equities. Corporate savings are automatically corporate equities but there is room for difference of opinion as to the amount of such savings. We have traditionally thought of personal savings being collected in the corporate form for capital formation by sale of stock to the public. Actually this process may not have played a very great role. It may be that the aggregations of corporate funds have been little if any greater than the retained earnings and net increase of corporate debt. It remains to be established that on the whole there has even been a significant net flow of personal savings into corporate equities.[5]

The statistical record of recent years does not show the issue of common stocks to be a very important source of funds for corporations. In the entire period 1930-1947 common stock issues provided only 9 per cent of the new corporate money. Retained earnings accounted for 66 per cent and preferred stocks and debt for 25 per cent. In the best years since 1930 common stock has constituted not more than 20 per cent of the securities issued for "new money" by corporations. In the years 1921 to 1927 stocks never provided more than 17 per cent of such funds. Furthermore the "new money" data include funds used to acquire unincorporated businesses.

The record of 1935-47 shows no flow of personal savings into corporate securities as a whole. During the thirteen year period there seems to have been a net disinvestment[6] of $3 billion by individuals in corporate securities.[7] If there seems to have been little substantial net flow of personal savings into corporation equities in the past, the prospects for the future surely seem even less bright. Features of both the corporate and the personal tax structures militate against equity investment more strongly than ever

[5]Much stock flotation has simply been a means whereby closely held shares have been distributed to the public. Stock issues of the late 1920s have been shown to involve very little flow of new personal savings into equities. See George A. Eddy, "Security Issues and Real Investment in 1929," *The Review of Economic Statistics*, Vol. XIX, No. 2 (May, 1937), pp. 79-91, and "The Present Status of New Security Issues," *Ibid.*, Vol. XXI, No. 3 (August, 1939), pp. 116-21.

[6]Such disinvestment presumably takes place primarily by individuals selling securities to the financial institutions, or by net retirement of securities.

[7]See note 3.

before. A widespread public feeling that profits are an unessential feature of the economic system prevails. Public policy seems to be based on the doctrine that if profits are abnormally high overt action to reduce them is called for. But if the chance of high profits is not available to offset the chance of low profits or loss, personal savings will certainly not eventuate in capital formation through the medium of corporate common stocks.

A further reason for the failure of personal savings to flow into corporate equities may be that these objects of expenditure are not actively sold. Other outlets for savings are subject to a great deal of salesmanship, particularly life insurance policies. Of course it is not literally true that there is no salesmanship applied to corporate equities. We probably need a serious study and analysis of advertising and salesmanship in this field. But without going into the matter in detail I submit that over the great bulk of the corporate equity field salesmanship is not competing for the income of individuals in anything like the degree that it is in most other outlets for their income. This is not to suggest that the introduction of much more extensive and intensive salesmanship in this field would necessarily be desirable. But it is a factor which should be considered in evaluating the prospects for a flow of personal savings into corporate equities in the future.

A substantial flow of personal savings into corporate equities would require reforms in the corporate and personal income tax structures and rates. It would also require that savers somehow be given confidence that they would not be deprived of the possibility of high profits as an offset against the possibility of low profits or loss.

*Equities for Small Business*

In a satisfactorily working free enterprise economy there will probably be a substantial flow of funds into the equities of businesses which cannot efficiently issue securities publicly. In the 13 year period, 1935-47, individuals are estimated to have invested $0.8 billion in the equity and debt of farming. During the same period it is estimated that there was a net investment of $1.9 billion in the equity and debt of other unincorporated business. In four of the thirteen years there was a net withdrawal of funds by individuals from farming and other unincorporated business combined. In only three years of the period did individuals invest as much as 15 per cent of their savings in these outlets. For the period as a whole, only about two per cent of personal savings were so invested.

It is probably painting with too broad a brush to lump together all businesses which cannot publicly issue their securities. Contrary to popular supposition it is probably the smaller of these businesses which have most ready access to saving and the larger of them which have the most difficulty.

The tax impediments to investment are less applicable to the persons of small income who invest in the very small business enterprises. There is less popular threat to the possible profits of small business. A saver who puts his funds into this outlet can feel some confidence that he can balance possible high profits against possible low profits or losses. The death taxes do not contribute so greatly to dissipation of the equities in the very small businesses.

On the other hand difficulties have increased for small businesses to become medium-sized businesses and for the latter to maintain themselves. For a small business to become large the owner must become wealthy, and the present tax system makes it very diffcult for a person to become wealthy. The present tax system encourages the wealthy to withdraw their funds from their medium-sized businesses and place them in tax exempt securities. The death taxes and anticipation of them necessitates the withdrawal of funds from the equities of the medium-sized business. The continual decline in relative importance of the medium-sized business is probably due in considerable part to this withdrawal of funds because of the nature of the tax system. Assurance of a substantial net flow of savings into small and, more particularly, into medium-sized business would probably depend on rather radical revision of the tax system and rates of the country.

### *General Factors*

A number of broad social factors appear to militate against equity investment. One of these is changes in customs concerning inheritance. If property commonly passed from an economically active person of one generation to a similar person of the next, savings would more commonly be placed in equities and equities would tend to continue to be held in that form. But such transmission of property is probably the exception rather than the rule. Property is left to or for the benefit of economically inactive widows, daughters, minors and others. Property so devised or intended to be so devised tends to move out of equities and into debt, out of venture and into security. Savings intended to be so devised tend initially to avoid equities. Death taxes of such a char-

acter as to contribute to a wider dispersion of property than would otherwise take place probably are also conducive to a net flow of funds out of equities and into debt.

Any change in inheritance customs, laws, or taxes which would result in the property of the economically active of one generation moving directly to the economically active of the next would be conducive to equity investment. Such changes are unlikely. The current trend is part of the great desire for contractual personal security. This trend manifested itself within the family before it did in the state.

The impediments to equity investment which might conceivably be reduced are two. The first is certain characteristics of the tax system. The other is interference with or anticipation of interference with realization of profits. Of course the latter is implemented to a considerable extent through the tax system.

The features of the tax system which interfere with equity or venture investment may be divided into two parts, those which are logical corollaries of a desire for more equal distribution of income after taxes and those which are not particularly conducive to equalitarianism. The latter would seem to be more susceptible to alteration than the former. In considering alterations of our tax system analysts should emphasize particularly those reforms which would contribute to private investment while not interfering greatly with the contribution of the tax system to equality of income. Indeed there is one great reform which would simultaneously be conducive to investment and to income equality; namely, abolition of tax free securities.

But in the main we have to choose between taxes designed to achieve greater equality of income and maintenance of incentives to invest. There is a great deal to be said for reduction of income inequality. On the other hand strong incentives for venture investment are necessary for a free enterprise system. In designing our tax system we should recognize that we must choose between promoting income equality and promoting venture investment. The first problem is to recognize that this is the choice. The second is to decide where to draw the line. My own current belief is that taxes and fear of taxes designed to reduce income inequality long ago went further in suppressing investment incentives than is consistent with satisfactory operation of the free enterprise system. If we want the free enterprise system we will have to retrace some of the steps which we have taken to reduce inequality through

the tax system. We may have to choose between abandoning essential features of the free enterprise system and eliminating many aspects of the tax system which are designed to reduce inequality. The choice must be made by balancing the advantages and disadvantages of free enterprise against the advantages and disadvantages of greater income equality. It is far from the function of this discussion to attempt such a balancing. It is only in point here to suggest that if we desire a flow of savings into capital formation under free enterprise which is conducive to stable high production we may have to abandon some of our attempts to reduce income equality.

Individuals might increase their equity investments if the financial institutions were somewhat less attractive. The extent to which life insurance companies attract savings is determined by the relative role of those types of policies involving a great deal of saving. The more popular endowment policies may be relative to straight life, and the more popular the latter compared with term policies, the greater the amount of savings relative to insurance in force attracted to the insurance companies. Anything which might be done to increase the popularity of the cheaper policies bears consideration. Benefit might follow if more companies offered renewable term policies. Of course if a reduction of the flow of savings into the insurance companies simply increased the flow into the other savings institutions, not much would have been gained.

The salesmanship and advertising of the savings institutions are probably a factor in the great flow of savings to the institutions. If the rewards of insurance salesmanship were determined on somewhat different bases the flow of savings to the companies might be reduced. This would not need to mean a reduction in pure insurance in force but might indeed result in a great increase. We surely could not look with equanimity upon an abolition of salesmanship and advertising in this field. But those who feel there is a problem involved in the great flow of savings to institutions should give consideration to the relative absence of salesmanship and advertising to attract savings into equities.

Savings are attracted to the institutions in part by their assumed safety. This attraction has been increased by the government guaratee of bank deposits and savings and loan shares. It may also be supported by a tacit confidence that government will never again permit large financial institutions to fail. If government insurance has had this effect it may to that degree be considered socially un-

desirable. It may be that an appropriate provision of liquidity for the institutions by the government would have been better than insurance. Proper liquidity might prevent mass failure but still permit individual institutional creditors to lose their funds under certain conditions.

### *Broadening Institutional Investment*

Unless or until we do take steps conducive to the flow of personal savings into equity investment what are we to do? If the great bulk or all of personal savings flow into the intermediary financial institutions is the situation hopeless? These institutions are now required by prudence, custom, and law to invest primarily in high quality debt. But can such debt, not guaranteed by the government, be generated by the private enterprise system in an amount equal to all or a great portion of personal saving? Some of our earlier analysis was designed to indicate the improbability of such a supply of debt.

The most promising supplementary outlet for the savings flowing to the intermediary institutions is equities. If these institutions could invest substantially in equities we might find a solution to our problem of the inordinate growth of debt. The savers could put their savings in the debt form which is apparently so dear to them while real capital formation could be financed by equities. We could indeed have our cake and eat it too.

What are the objections to the intermediary institutions investing in housing, other rental real estate, marketable common stock and other business equities? The traditional objections are various. Since most of the funds of the institutions are acquired through the issue of fixed dollar liabilities[8] there is a *prima facie* case for their assets to consist of fixed dollar instruments of a high degree of reliability. There can be no quarrel with the idea that the assets of the institutions should be high grade debt, if an adequate supply of such debt is available. But if the proportion of savings flowing into the institutions is so great that the private enterprise system cannot generate a sufficient quantity of satisfactory debt, the fact that it would be nice and logical for the institutions to confine their investments to debt becomes beside the point. The important question becomes whether and how the institutions can invest in equities.

[8]Some of these liabilities are not so definitely fixed as is sometimes represented. Through the power to increase or decrease dividends, the life insurance companies have considerable leeway.

Institutional investment in equities requires two conditions, first that the managers of the institutions shall see fit to invest in equities, and second that they shall be permitted to do so by law. Both the law and the inclination of the institutional managers are largely determined by public opinion.

One of the chief reasons public opinion, the law, and the managers have looked askance at equities as assets for institutions is that to a greater or less degree the institutions must stand ready to meet their liabilities on demand. It is common sense that if an institution must meet its liabilities on demand it is necessary that it have assets which can be cashed instantaneously.

A second reason for keeping equities out of the assets of the institutions is the possibility that the dollar value of equities will decline and the institutions may face great loss and even bankruptcy. This factor is particularly serious because of the very high relation of total liabilities to total assets in the financial institutions. Losses of rather small magnitude may reduce the value of the assets of an institution below the amount of the liabilities.

A third objection to the ownership of equities by the institutions is that it will involve them in active management of other segments of the economic system. They will engage in construction, make rental contracts, and hold stock with voting power. There are a number of reasons why the prospect of such a development is not looked upon with equanimity. It may be doubted whether the managers of these financial institutions have the capacities for efficient entrepreneurship. They may do this job which is foreign to them so badly that executive losses will be experienced. Further, the institutions and their managers may acquire a degree of economic power which is repugnant to the public. From the earliest days of this nation the people have been distrustful of the moneyed powers. They have been much more distrustful of financial institutions and "Wall Street" than they have been of rich men as such. For the financial institutions to be permitted to invest extensively in equities might be interpreted as giving them a power exceeding any that had ever been feared throughout our history.

These objections to equity investment by the institutions on the grounds of liquidity, valuation and control are all serious and well-founded. If the proportion of personal savings flowing into the institutions were of reasonable proportions, there could be no doubt of the reasonableness of the traditional prohibitions. But the savings flowing to the institutions are of gigantic proportions. If the

public should be convinced that getting the funds of the institutions invested is of the utmost importance to success of a free enterprise economic system we may be able to devise means whereby the disadvantages of equity investment by the institutions may be largely avoided. In any case we may be able to decide that these disadvantages are a small price to pay for substantially facilitating the flow of savings into capital formation.

### *The Liquidity Problem*

There are a number of facets to the liquidity question as applied to investment in equities. The ready availability of funds placed in the intermediary institutions might be somewhat reduced. The *de facto* immediate availability of funds in savings banks, savings and loan associations, and life insurance companies might be replaced by payments only by installments or after a considerable period of notice. Whether a proposed reform has sufficient chance of adoption to be worth discussion is always a matter of judgment. In this case it would seem that the demand character of institutional liabilities is so insisted upon by the public that it cannot be changed. This requirement of the public is one of the data with which we are working. While some or all of the liabilities of the institutions are payable on demand, the great bulk of them is not in fact demanded. Even in a great contraction such as 1930-33 the larger life insurance companies and mutual savings banks experienced little or no loss of funds. Further, if the monetary and fiscal affairs of the country are in the future carried on in a manner which permits private enterprise to survive at all, we will never have great contractions of the funds of financial institutions. We may look forward with confidence to stability of the bulk of the funds of the financial institutions. If we cannot anticipate such conditions we cannot have confidence in the future of a free enterprise system at all.

While the funds of particular individuals are withdrawn from an institution, the withdrawals are commonly balanced by accretions from others. From this standpoint of the liquidity problem of the institutions the important thing is not the character of the contracts with creditors but the probable behavior of total liabilities. Insofar as the financial institutions can achieve a diversification of liabilities their liquidity problem will be reduced. If it be assumed that the private enterprise system will operate successfully in the future, the financial institutions can for practical purposes be looked upon as immortal. They constitute pools of funds

into which and out of which there is a flow, but the contents of which may be looked upon as perpetual. Viewed from this standpoint, the funds of the institutions may be invested on a perpetual basis insofar as such investments appear to the income advantage of the institutions.

Quite aside from the possibility of the institutions investing in equities, it is necessary that government take special steps to provide for or reduce the need for the liquidity of institutions. This has been recognized to some degree by the provision of the Federal Reserve banks in connection with the commercial banks, and the Federal Home Loan banks in connection with the savings and loan associations. From the standpoint of the entire financial system and the typical financial institutions, short-term assets cannot be self-liquidating if the economic system is to operate successfully. Furthermore, the volume of short-term assets is quite limited relative to the total funds of the institutions. Provisions for liquidity for the long-term debts held by the institutions might also be satisfactory if applied to equities.

The solutions which are needed to solve the liquidity problem in the absence of equity investments will be satisfactory if there are equity investments. Investment in equities would not create any liquidity problem which does not already exist.

It is suggested that the institutions providing liquidity to the banks and the other financial institutions should look not to the specific assets of the latter but to their general condition. Any financial institution which can appropriately be permitted to stay open and receive the funds of the public should have unlimited support in meeting the demands of its creditors. In summary it appears that the problem of liquidity need offer no impediment to large investments in equities by the financial institutions.

### *The Value Problem*

The intermediary financial institutions typically acquire 90 or 95 per cent of their funds through fixed dollar liabilities. Only 5 or 10 per cent of their funds represent capital, surplus or other equity funds. A six per cent decline in the value of assets of an institution having only a five per cent capital ratio renders the institution bankrupt or insolvent. If equities are subject to substantial fluctuations in value, will not the holding of them increase the chance of insolvency to an intolerable extent?

It is no doubt true that the very low capital ratio of the institutions are a hindrance to equity investment. If the capital ratios

were higher we could look with greater equanimity upon their investing in equities. It may be that some improvement in the capital ratio situation would aid not only the possibility of the institutions investing in equities but other aspects of their investment function as well. But the prospects for substantial improvement in capital ratios of financial institutions are not very promising. We need to explore whether substantial equity investments for financial institutions may be possible even with the present capital ratios.

The extent to which housing, common stocks, and other equities which might be held by the financial institutions actually fluctuate in value is not a simple straightforword matter. We all know that from the standpoint both of economics and accounting there are no immutable and universal principles of value and valuation. There are great differences of opinion concerning the appropriate method of valuation of various kinds of assets held by various persons. In the field of valuing assets of financial institutions there has been great uncertainty as to the appropriate extent to which cost of acquisition should be the basic criterion of value and, on the other hand, the proper role of market price.

The institutions must themselves carry their assets at some value and must from time to time make adjustments in value. But it is also a function of the government supervisors of these institutions to value their assets. The principles of valuation followed by the institutions and the supervisors are not always the same. It has never been clear whether the supervisors should require the institutions to follow the valuation practices of the supervisors. It has never been clear whether one set of principles was properly applicable to both valuations or whether there were two sets of principles each serving its own appropriate function.

In the case of mortgage and other loans and real estate used in carrying on financial business the rule of cost has been the basic rule. This has been true partly because of the absence of market prices for such assets. On the other hand the supervisors have traditionally been inclined to value marketable bonds at market or cost whichever was lower. The institutions themselves left to their own devices have been inclined to value such securities on a basis of cost. The supervisors have to a degree adopted the rule of cost in valuing high grade bonds. To the extent that the rule of cost can apply to equities held by the financial institutions the value question need offer no impediment to their acquisition.

Even if market price be used as a criterion of value, if it is lower than cost, equities will not be subject to so great declines in values as one might suppose. They may have been bought at various stages of the cycle and consequently there will not be a matter of marking down assets from peak to trough values. Nevertheless, it is probable that strict adherence to a rule of cost or market whichever is lower would preclude any substantial investment in equities.

If the rule of cost is to be followed there must be some deviations from it. Obviously if an asset becomes worthless, if its income prospects are nil, it must be written off the books. We need to find some kind of a workable rule which will recognize depreciation of particular assets and their income prospects relative to assets in general. If equities are to be held by the institutions they cannot as a whole be valued downward with every panic and wave of economic pessimism. I suggest as a basic rule that the assets of financial institutions be valued at cost unless their long-term earnings prospects deteriorate substantially relative to the earnings prospects of institutional equity assets as a whole. In the case of assets experiencing such deterioration there should be a write-down in book value from the standpoint both of the supervisory agency and of the institution. In the case of some kinds of equity assets, market price may be a useful criterion of such deterioration. Value of a particular equity might be written down proportionately when its market price fell relative to the market price of institutional equity assets in general. An asset declining in market price only pro rata with assets in general would be carried at cost.

Under this system the value of the equity assets of an institution could decline and indeed it could become bankrupt due to a concentration of holdings of equities whose earnings prospects declined relative to those of equities in general. An institution could lose and fail because of a concentration of risk. But because only relative declines in earnings prospects would be significant there would be no concentration of loss and failures in times of economic depression. If institutions succeeded in diversifying their risks there would be no reason why extensive investment in equities should lead to intolerable institutional losses or failures.

If institutions were not required to write down values because of general market price depreciation it seems reasonable that they should not be permitted to write values up on a basis of market appreciation. But under common accounting procedures they can make such write-ups by selling assets which have increased in

market price even though they use the proceeds to purchase other similar assets. This situation could be corrected by requiring profits from the sale of assets to be placed in a valuation account. To this account could be charged both losses realized on the sale of assets and write-downs of assets which have suffered relative deterioration.

It may be objected that as a result of the application of this rule of cost a great disparity might arise between the book value of the assets of an institution and the current value judged by orthodox criteria. Such disparities might result from a secular decline in the price level, secular stagnation of the economic system, or a secular rise in the interest rate. So far as price level decline is concerned it seems to me that in any planning of economic policy we have got to assume a monetary policy which will prevent radical secular decline in the price level. Likewise, it is futile to try to run our financial institutions in anticipation of the appearance of great chronic unemployment. If a secular rise in interest rates should cause a reduction in prices of institutional assets, increased earnings on short-term assets and on new funds will provide a source of funds with which the book value of long-term assets could be gradually written down. The law might appropriately require that earnings on equities beyond a certain level, say, 3 per cent, should be placed in valuation accounts from which losses and write-downs could be met.

There have been proposals that equities be written down each year by a certain fraction of the amount of which book value exceeds market price, for example, one fifth. Such a rule would no doubt make equities far more practical institutional assets than the simple rule of market price.

In summary, I believe equities held by institutions need not bear a danger of value decline such as to make them undesirable institutional assets. If the public, the institutions and the supervisory governments can agree on valuation principles such as those discussed above, the value problem need offer no impediment to institutional investment in equities.

Some analysts while agreeing that there is great need for the financial institutions to invest in equities, have believed that the fixed dollar liabilities of the financial institutions preclude such disposition of funds. Accordingly they have suggested that a necessary condition of equity investment by the institutions is a change in the nature of the contract whereby they acquire their funds.

It is suggested that the claims of individuals against life insurance companies, for example, should be flexible in dollar amounts, depending on changes in value of assets. If insurance companies and other savings institutions could make contracts on such a basis this would help to make equity investments feasible. But I am very skeptical that such contracts would be acceptable to the public. The savers want fixed dollar contracts. There is little chance that individual institutions will be able competitively to popularize liabilities tied to market value of assets. Neither would the public tolerate government decree that the liabilities of the savings institutions should be placed on such a tabular basis.

Contracts linked to the cost of living index might meet with greater success. Such contracts would have an appeal to the public which would not apply to a rigid adjustment of liabilities to asset values. Of course, prices of equities and the cost of living will not move precisely together. But if prices of equities and cost of living are more closely related than original dollar amounts of liabilities and cost of living, such contracts might be advantageous to the financial institutions.

The foregoing discussion has been designed to show that even though the institutions must continue to acquire the bulk of their funds through fixed dollar liabilities we can follow policies with respect to the liquidity and valuation of assets of financial institutions which will enable them to invest safely in equities.

### *Concentration of Economic Power*

We come now to the objection that if the financial institutions invest large segments of their funds in equities they will come to control great portions of our real property and of our business institutions. This is the most serious objection of all. If the institutions invested in equities in such volume as to be of substantial significance to the investment process they would indeed come to own a large portion of the buildings of the country. They would own great blocks of the corporate stocks. They might be partners in many of the small businesses of the country. But while the financial institutions as a whole might come to own great portions of the equities of the country, this would not mean that any particular institution hold a dominant position.

If the institutions invest in housing one of the first principles of such investment should be diversification. If this principle is followed, because of the discretion of the institutions, the requirements of the government supervisors, or both, there will be no

monopolistic control of housing in any area. Of course, it may be alleged that the institutions would engage in collusion to maintain rents, restrict supply or otherwise act contrary to the public interest. But such a possibility of collusion is present in most economic fields and we maintain devices for preventing or combatting it. The same considerations apply to investments in rental real estate other than housing.

There is probably yet greater fear of the concentration of control which would result from financial institutions investing a large portion of their funds in common stocks and owning a large proportion of the corporate shares of the country. But if the institutions follow the principles of diversification this objection loses some of its force. If an institution diversifies its common stock holdings it will not be in a dominant position in any large corporation whose stock it owns or in any industry. It may be objected that a number of the great institutions combined will own enough of the stock of particular corporations to control them. But we scarcely object if stockholders agree in choosing a management.

It will be suggested that the objectionable aspect of the financial institutions dominating the selection of management is not that they will dominate the selection of management of one company but that they will control more than one. It would not be an evil for them to control one steel company but it would be an evil for them to control more than one. Undeniably a great danger is involved here. But I believe the problem can be met. I believe that on the whole managements of different corporations will compete even though the corporations have fifty important stockholders in common. The heads of different government bureaus compete. The managers of various plants or other segments of corporations compete whenever they are not under the severest restraints. It may be that extensive ownership of common stock by the financial institutions would need to be accompanied by revision and tightening of the anti-trust laws. I believe that this avenue of investment could be effective without increasing monopoly. It seems worth trying in an attempt to achieve the investment necessary for satisfactory operation of a system of private enterprise.

We may then conclude that considerations of liquidity, asset valuation and financial control of business need not preclude large equity investments by the financial institutions.*

* The concluding installment of this article will be published in a forthcoming issue of this journal.

# THE DEMAND FOR FUNDS BY AMERICAN BUSINESS ENTERPRISES: RETROSPECT AND PROSPECT—*I**

*By* NEIL H. JACOBY

*College of Business Administration*
*University of California, Los Angeles*

## *I—Introduction*

During the past ten years a large and influential school of economists has reiterated the view that *the* fundamental American economic problem is to find investment outlets for a chronic surplusage of savings. The public tends to spend too little on consumption, this school has said, and the supply of savings persistently tends to exceed the amount of investment that society desires to make, with the result that incomes and production fall below the level that would support full employment. Large-scale unemployment in the future is inescapable unless larger "offsets" to savings are developed. Therefore, this school has urged government to tax savings away from individuals, and to engage in programs of public investment, in order to balance the equation of savings and investment at a high level of national income and employment.

Paradoxically, the exact reverse of this problem has arisen in the United States since World War II. The consumption propensities of the American public have risen to heights undreamed of. At the same time, business investment in plant and equipment has proceeded at a record pace. Political considerations have forced the Federal government into enormous outlays on armament, and into economic aid to nations disorganized by war or on the periphery of Russian power. The rate of aggregate expenditure on investment goods has for a considerable time exceeded the desired rate of savings. Rapid price inflation has been the result, with a consequent reduction in real income and "forced" savings by large segments of the population.

The important question is whether this is a temporary condition, arising out of the exercise of demands at home that were deferred during the war period, and out of destruction and economic dislocations abroad. Or do they reflect larger run changes in the character of our economy, and in its relation to the rest of the world, that may produce a persistent deficit of desired savings

*The substance of this paper was first presented in two lectures given at the Life Officers Investment Seminar at Lake Geneva, Wisconsin, June 24, 1948. However, the Life Officers Investment Seminar and its sponsor, the Financial Section of the American Life Convention, are not necessarily in agreement with the statements made herein.

under investment demands for funds for at least the next five or ten years? This paper does not pretend to answer that question. Its purpose is to throw some light on the matter by examination of one important outlet for savings, — net investment by business enterprises.

Business enterprises demand funds to increase their total dollar assets. For purposes of discussion, these assets may be grouped conveniently into four categories:

*First,* cash and equivalent, held for transactions purposes, to meet emergencies, and to purchase goods on favorable terms.

*Second,* inventories, held for processing or for sale, or for speculative purposes.

*Third,* notes and accounts receivable, representing credit extended to customers.

*Fourth,* plant and equipment.

Our task is to estimate the probable amounts of expansion in the dollar value of the total assets of business, and to predict the ways in which the funds necessary for such expansion will be supplied. In general, funds to expand assets are supplied *internally* through retention of profits and *externally,* by resort to bank loans or issues of securities. Depreciation allowances, it should be noted, are not sources of funds to expand total assets; they may merely change the composition of the total assets carried on the books of account. Specifically answers are sought to these questions. What was the nature of the market for business funds prior to World War II? What wartime and postwar events significantly changed this market, both on its demand and on its supply sides? What is the present financial position of business? On defensible assumptions regarding future levels of production, employment, prices, disposition of income by consumers, and fiscal-monetary actions of the Federal government, what demands for funds are likely to emerge? How will these funds be supplied? What is the probable relationship of demand to supply of funds, and what are the implications of this relationship for money rates?

The task of estimating business demand for funds to expand assets is a particularly difficult one, because those demands are intimately related to other economic variables. An increase in the rate of net investment in business assets is a powerful causal force in increasing production, employment, and consumer incomes in the whole economy. But a rise in the rate of governmental or

consumer expenditures, brought about by other "exogenous" causes, will also augment the market for business, increase the prospects of profit, and produce a rise in business investment. Therefore, the demand for funds by business concerns is both a cause, and an effect, of changes in the general economic situation. For example, if the Federal government borrows or taxes away huge amounts of savings from the public to finance an expanded armament program, at a time when both consumer and business spending is at a high level, this action will further augment the demand for funds by business and will tend to raise their cost. On the other hand, if consumers should materially curtail their outlays on such durable goods as houses, automobiles, home appliances and furniture, in the face of stable employment and income flow, this will dampen the profit outlook and reduce business demands for funds to expand assets at the same time that it will increase the supply of savings. However, business investment normally plays a dynamic role. It is the "trigger mechanism" of the cyclical process.

Because of these close inter-relationships, any effort to gauge the future character of the demand for and supply of investible funds for business necessarily involves assumptions as to the levels and directions of movement of other economic variables. Some assumptions must be made, in particular, regarding the probable future fiscal and monetary actions of the Federal government, regarding the trend of prices, and regarding the flow of income to consumers and its allocation to consumption outlays and money savings. Unfortunately, these inter-relationships have not yet been clarified. There is a fertile field for research in this area. Risky as it is to make such assumptions, they cannot be avoided if one desires to predict trends in business finance.

Taking a long view of American economic development, there is much evidence that demands for funds to finance accumulations of physical assets by government and by consumers has grown *relative* to the demand of business for funds to finance increases in assets. The relative importance of consumers' durable goods in the economy, including housing, automobiles, furniture and household equipment, has been growing rapidly. For example, during 1946 and 1947 mortgage credit on housing rose by more than nine billion dollars, and it is currently expanding at the rate of about one billion dollars per month. Within this same two-year period, consumer installment credit, most of which is used to finance the passage of automobiles and household appliances into consumers'

hands, rose by more than $4 billions. Government, too, has tended to utilize a growing proportion of the national income in adding to society's stock of roads, public buildings, dams and other public works, as well as in extending gifts and credits to foreign countries.

One important implication of these trends is that a strong revival of investment in business assets will produce more active competition for the available supply of investible funds than would have been the case two or more decades ago. Relatively speaking, business investment now bulks smaller than it used to in the totality of economic life. It is worth pondering the implications of the fact that never before has the United States experienced a boom in business investment in an era of Big government.

It is not proposed to estimate business demands for funds over a short period of one or two years. Short-term forecasts depend upon the timing and amplitude of the business cycle, and upon numerous factors of short-term significance. Instead, a longer period of six or seven years is considered, and an effort is made to determine the probable *average annual* demands by American business corporations, — other than banking, insurance and financial concerns, — for funds to expand their assets during the period running roughly from 1948 through 1955.[1]

Use of an historical approach to the problem has validity, because recent investigations of the financial structure and financing policies of business corporations reveal an extraordinary stability through the past thirty years. Certain long-run changes have occurred, but they have been slow and persistent rather than rapid and erratic. There is a *prima facie* case for the view that these tendencies will continue into the future.

It is convenient to divide the survey into several more or less distinct periods, as follows:

1. *The Immediate Prewar Period,* covering the late 1930's and the last full year of peace, 1940. Although the United States did

[1]Because the probable error of forecast enlarges as the time-span of a forecast increases, business and public policy-makers are prone to explain publicly their decisions solely in terms of current and near-term economic conditions. But many decisions *imply* assumptions about the long-term behavior of the economy, which should be made explicit. For example, the decision of the Federal monetary authorities to prevent interest rates on long-term Treasury obligations from rising appears to imply, among other things, a forecast that investment in the United States over the long-term will be deficient, and low interest rates will provide a desirable stimulus to investment. It is in the public interest that such implications be dealt with openly, and the merits of the long-term strategy examined.

not become a formal belligerent until December of 1941, the American economy was in process of transformation to a war economy during most of 1941.

2. *The War Period,* covering the five years 1941 through 1945. The terminus of this period is placed at the beginning of 1946 on the basis of the termination of the war in August, 1945.

3. *The Postwar Transition and Boom,* running from 1946 to the present date.

4. *The Future,* encompassing for present purposes the years 1948 to 1955.

By taking a long backward view of business demands for funds, it is possible to gain perspectives useful in looking forward into the future. If the time dimensions under examination are very short, there is danger that the analyst will be unable to distinguish first-order from minor-order variables. In referring to "business" hereafter, unincorporated as well as corporate business is meant. However, data from business corporations, other than banking, real estate and insurance corporations, will be used frequently because of its greater availability. Occasionally figures for all corporations, financial as well as non-financial, are introduced.

### *II. Business Demands for Funds in the Prewar Period*

Available information rather clearly suggests that the total assets of business *declined* appreciably during the decade of the 1930s as a whole, despite some expansion during the cyclical peak years of 1933 and 1936. Taken as a whole the decade was one of subnormal economic activity and falling price levels, during which full employment was never approached even during the best years.

During the 1930s, expenditures on new plant and equipment by non-financial business corporations averaged only about $4 billions per annum, whereas depreciation allowances averaged $6.3 billions per annum.[2] The dollar value of fixed assets, net of de-

[2]*National Income Supplement* to *Survey of Current Business,* July, 1947, Table 5, p. 20. The question is frequently raised whether depreciation allowances are not generally excessive, with the consequence that the physical equipment of business may improve even though no *net* addition to the book valuation of fixed assets is made. Available evidence suggests, on the contrary, that depreciation allowances have usually been *deficient,* if obsolescence as well as physical deterioration is accounted for in depreciation. That management tends to underallow for obsolescence due to technological progress is suggested by the periodic large write-offs of property made by large American enterprises and charged against earned surplus, and by the fact that the market value of corporate equities has over a long period of years failed to rise by the amount of the reported profit retained in business. See Cowles Commission, *Common Stock Indices* (Bloomington: Principia Press, 1941.)

preciation allowances, was falling. During the 1920s, in contrast, business spent an annual average of eight billion dollars on new plant and equipment. If one adopts the conservative assumption that outlays on plant and equipment *during the 1920s,* as a whole were no more than would have been consistent with a satisfactory level of employment and necessary provision for economic growth *during the 1930s,* the startling conclusion follows that by 1940 there had emerged a "deficit" in the fixed assets of American business of some $40 billions in terms of prewar prices. This sum is probably equivalent to a deficit of $60 to $80 billions at current prices. Here is a fact of great significance. It helps to explain the present large demand for plant and equipment by making clear that American businesses entered World War II with fixed assets that were far short of those required for full employment in peacetime. The large postwar investments in plant and equipment are therefore not a product merely of the wartime gap in the building of civilian production facilities. A potential "backlog demand" for such facilities was building up for a decade previous to 1940.

With regard to other types of business assets, the decade of the 1930s witnessed a decline rather than an increase. Inventories held by business as a whole were about one billion dollars less in value at the end of 1940 than at the end of 1931,[3] although physical inventories may have been somewhat larger due to the decline in price levels. Notes and accounts receivable also appear to have declined moderately during the decade as a whole, to judge from studies of samples of balance sheets of large and small corporations in manufacturing and trade[4]. Among the major categories of assets, only cash and equivalent rose. In short, an overall view of the 1930s is one of a shrinking business economy, with little or no *net* demand for funds in the aggregate. Global totals, of course, conceal expansion in many individual firms and industries.

So much for the conditions of demand for business funds in the immediate prewar years. What of the sources of supply of funds? An initial question concerns the relation of retained earnings to funds procured from external sources. For corporate business in the aggregate, the record is clear that a larger amount of money was paid out to shareholders during the decade of the 1930s than was earned. This reflected, of course, the decline in dollar value of corporate assets and the liquidation of many enterprises, par-

[3] *National Income Supplement, op. cit.,* Table 7, p. 21.

[4] Jacoby & Saulnier, *Business Finance & Banking,* New York: National Bureau of Economic Research, p. 84.

ticularly in the financial field. However, retained earnings were a source of funds to solvent non-financial corporations during the more prosperous years of the 1930s. Were they becoming relatively a more important source?

There has been a general misapprehension, growing out of studies of savings, investments and business finance made for the T.N.E.C., that business has persistently tended to become independent of the capital markets; that it is able to finance itself out of profits retained. More penetrating analysis of this matter reveals that such a conclusion is not accurate. The fact is that the ratio of dividends to corporate earnings has not changed significantly over a long period of years, being about 66 2/3 per cent, although the ratio fluctuates considerably through the business cycle. Moreover, the proportion of the annual expansion in total corporate assets financed by retained earnings has not risen appreciably, although there are wide year-to-year fluctuations in the amount of asset expansion. When the rate of expansion in total assets is low, a larger part of the expansion can be met through retention of earnings. But the record shows that when asset expansion proceeded at a rapid, and particularly at an accelerating rate, a vigorous demand for external funds was generated.[5] In most years of the 1930s asset expansion of solvent business was small. This was, indeed, the only reason why retained earnings sufficed to finance so large a part of it.

As might be expected, the dimensions of the capital markets for business securities during the 1930s were comparatively small. The average annual amount of publicly-offered securities of non-financial corporations for new money purposes amounted to only 700 million dollars during the decade. This was less than one-quarter of the annual average of three billion dollars achieved during the 1920s, even after omitting the investment trust and holding company issues which distorted the figures for new money issues during 1928 and 1929.[6] Giving effect to the growth of the economy since the 1920s, and to the increased price level, it would appear that offerings of corporate securities for new money would have to rise to the level of about $8 billions annually during coming years, if capital market financing of business were to play a role comparable to that of the 1920s.

During nearly the whole decade of the 1930s and during most of the 1940s, equity security markets were depressed. By a de-

[5]Jacoby and Saulnier, *op. cit.*, p. 95.
[6]Source: *Commercial and Financial Chronicle.*

pressed state of the market for equity securities is meant a price level for common stocks that puts a *market* value on the equity of a going business *less* than the current *cost of reproducing* that equity. It is paradoxical that during most of the time during the 1930s one could acquire business far more cheaply by purchasing their common stocks in the market than by reproducing their assets. So long as that condition prevails, no rational business management will wish to dilute the value behind its present shares by selling a new issue. This persistent pessimism about the values of going business concerns has continued into the 1940s. It must be dispelled before a burst of equity financing will occur.

A number of significant changes did occur during the last half of the 1930s in the institutional structure supplying funds to business, and in the devices for extending credit. The principal developments were:

1. The growth of term lending by commercial banks. It is estimated that banks had about $2.2 billions of term loans to business concerns outstanding at the end of 1940.

2. The growth of private placements of non-marketed issues of corporate bonds and notes directly with banks and life insurance companies. Nearly one billion dollars of such credits were outstanding at the end of 1940.[7]

3. The burgeoning of many types of intermediate credits to medium and small business secured by accounts receivable, inventories, and liens on machinery and equipment.

4. Growth of commercial finance companies competing with the commercial bank in extending credit to business.

5. The expansion of consumer credit on a vast scale, financed in large part indirectly by the commercial banking system. The growth in the use of consumer durable goods and the ease with which consumers could finance their acquisition on installment terms resulted in the building up of $10 billions of outstanding consumer credit by the end of 1941. The injection of vast quantities of credit at the consumption end of the economic process enabled businesses to operate with smaller accounts receivable, and reduced business demands for credit below the levels that would otherwise have been reached. This was a factor of no mean proportions in modifying business demands for funds during the 1930s. It will, no doubt, operate with great effect in the future.

[7]Jacoby and Saulnier, *Term Lending to Business*, p. 32.

All of these changes, and particularly the growth of direct long-term and intermediate-term loans to business, were adaptations to the depressed state of the equity markets during most of the 1930s. They were symptomatic of the difficulty business enterprises had in obtaining funds on favorable terms through publicly-distributed issues of securities. It would have been much better for the economy if a high feeling of confidence had persistently supported market prices of business equities at levels where more funds would have been introduced into business through this channel. One of the salient issues confronting the American private enterprise system is how such a state of confidence can be generated and maintained, so as to finance on an equity basis a much larger proportion of the necessary growth of business assets.

### *III. Wartime Demands for Funds by Business, 1941-1945*

Having delineated the principal features of the demand and supply sides of the American business financing market in the years immediately preceding World War II, we may now examine the principal changes wrought by the war.

As a consequence of the enormous expenditures of the Federal government in preparing for and prosecuting the war, financed mainly through bank credit inflation, a depressed American economy sprang to life. The range and tempo of production was magnified. New scales of money values emerged. War expenditures of the Federal government rose from six billion dollars in fiscal 1940-41 to about $90 billions during fiscal 1943-44. Notwithstanding the mobilization of 11 million men and women into the armed services, employment in non-agricultural establishments moved from 32 million in 1940 to 41.5 million in 1945. The physical volume of production in manufacturing and mining, as measured by the Federal Reserve Index, reached its average annual peak in 1944 at the level of 235, which compared with 125 in 1940. Up to the climax of the war effort in 1945 prices were held down under a network of rationing, allocation, and direct price controls. The wholesale price index moved up slowly, from 79 in 1940 to 106 in 1945. Gross national product, reflecting changes in both volume and price dimensions, moved from $100 billions during 1940 to a wartime peak of $213 billions in 1945.[8]

The salient question for our purposes is: How did this enormous expansion in the physical output of the American economy and the even greater expansion in its dollar value, affect the in-

[8] *National Income Supplement* to *Survey of Current Business*, July, 1947.

vestment in business assets? The record is clear that this expansion was *not* accompanied by large additions to the plant and equipment of business useful for civilian purposes. It resulted from three factors: first, the drawing upon unemployed manpower and facilities; second, the utilization of pre-existing facilities more extensively, through longer hours of working two or three shifts per day; third, the construction of vast arsenals and other industrial facilities by the Federal government which did not appear in the books of business enterprises.

Figures on the values of industrial facilities put in place between mid-1940 and the end of 1943 published by the War Production Board, show a total of 33 billion dollars during the three and one-half year period. Of this total, some 17 billion dollars were Federally-financed and about 16 billion dollars were non-Federally-financed.[9] In view of the fact that the net book value of the fixed assets of all non-financial corporations at the end of 1939 was approximately $85 billions, it is apparent that the $33 billion of public and private investment in war industrial facilities put in place between mid-1940 and the end of 1943 produced much less than a 50 per cent increase in the magnitude of the nation's fixed plant. Such a rough estimate indicates that the doubling of the gross national product between 1940 and 1944 was in large part achieved by a more intensive use of plant.[10]

The average annual investment made by non-financial business corporations in fixed assets during the war years was under five billion dollars — a rate that *only slightly exceeded the four billion dollar* average of the 1930s. Until the early part of 1942 private investment in new plant and equipment was heavier than governmental investment. Subsequently, the government, acting through Defense Plant Corporation, R.F.C., War and Navy Departments, and Maritime Commission built, equipped, and operated vast arsenals, and private investment in plant dropped to a very low level.

Because the war years 1941 through 1945 produced little, if any, net increase in the book value of the fixed assets privately owned and on the books of corporate business, the question may be raised whether the government-financed war plant did not constitute an important permanent addition to the nation's facilities useful for peacetime production. Despite the widespread apprehension during the war that government-owned plant would constitute a vast

[9]Source: Industry and Facilities Division, War Production Board, September 22, 1944.

[10]Jacoby and Saulnier, *Business Finance and Banking*, pp. 176-77.

surplus of unwanted facilities overhanging the market, events proved the contrary. The greater part of the $17 billion Federal investment in war facilities was heavily concentrated in a few industries, notably aircraft, shipbuilding, explosives and ammunition loading, and guns and ammunition. A. D. H. Kaplan estimated in 1944 that approximately only one-third of the government investment in war industrial facilities, that is, under $6 billions, was sufficiently convertible to lend itself to rapid postwar disposal.[11] If spread over the four years 1942-1945, this would add only about $1.5 billion per annum to the value of *usable* investment in fixed assets. It would bring the total of privately built and government-built useful plant to about $6.5 billion — approximately to the amount of depreciation charges made during the war period by non-financial business. The conclusion follows that, up to the end of 1945, the magnitude of the private and convertible public investment in fixed assets was just about that sufficient to maintain the value of productive plant at the level at which the nation entered the war. This is highly significant and it is contrary to common impression.

The wartime developments in the current assets held by American business present a much different story. During the five years 1941-1945 the current assets of all non-financial corporations rose from 60 to 97 billion dollars, a rise of 62 per cent. By far the largest part of the $37 billion dollar increase came in cash and government securities (25 billion dollars) and in inventory (seven billion dollars).[12] Business enterprises built up an unprecedented liquidity mainly in order to be in position to meet the large normal and excess profits tax liabilities they were incurring. A secondary factor was simply inability to use liquid funds to acquire tangible assets. Corporate profits rose sharply after 1940, even after provision for heavy taxes, and business continued to follow a conservative policy of distributing dividends. The ratio of dividends to net profits after taxes, which has averaged about 67 per cent during the past seventy years,[13] fell to less than 50 per cent between 1941 and 1945. As a result, United States corporations ploughed back about $26.7 billions of earnings during these five years.[14] If the $1.3 billions obtained during these years from stock issues be added, the resulting estimated increase in corporate *net worth* was about $28 billions. This increase in net worth

[11] A. D. H. Kaplan, *The Liquidation of War Production*, p. 99.
[12] S.E.C. Statistical Series, *Release No.* 797.
[13] See Cowles Commission, *Common Stock Indices.*
[14] *National Income Supplement* to *Survey of Current Business*, July, 1947.

was about $4 billions more than the increase in *net working capital.* The difference was probably made up approximately by retirement of long-term indebtedness, which went on apace during the war period, particularly in railroad and other public utility companies.

To summarize: business corporations emerged from the war, not with a splendid new plant as the critics on the left have often charged, but with a substantial increase in their liquid assets and with somewhat less long-term indebtedness. In this respect, corporate business fared much the same as did American consumers. They, too, emerged from the war with little or no increase in their durable equipment, but with large liquid assets and less indebtedness. Both business enterprises and consumers have been engaged in an effort since the war to convert their liquid assets into tangible commodities.

With regard to the supply of funds to business during the war years, the most significant factor was the enlarged role of the Federal government as financier of American business engaged in war production. By far the largest share of the increase in the short-term liabilities of business consisted of funds owed the Federal government in the form of accrued taxes, and advances and prepayments by Federal agencies on war production contracts.[15]

Because of the financing provided in one way or another by the Federal government, the normal external sources of business funds did not play a significant role in expanding business assets during the war years. Short-term credit procured by commercial banks and from trade creditors increased somewhat during 1941, but declined again when the Federal government began in 1942 to finance war production extensively. At the end of 1945 outstanding commercial and industrial loans of banks to business enterprises were actually less than their amount at the end of 1940.[16] This was true despite the low interest rates that prevailed on commercial credit, which resulted from the policy of financing the war with cheap money. With respect to the public securities markets, the average annual amount of domestic corporate securities offered for new money during 1941-1945 was under $800 millions, reflecting a low level of activity very nearly parallel to that of the depressed 1930's.*

[15] *Ibid.*, p. 181.

[16] Annual Reports of the F.D.I.C.

* The concluding installment of this article will be published in a forthcoming issue of this journal.

# COMMON STOCKS AS INVESTMENTS FOR AMERICAN LIFE INSURANCE COMPANIES, A NON-ACADEMIC VIEW—*I**

*By* S. H. NERLOVE

*School of Business*
*University of Chicago*

## 1. *Introductory*

Recently the suitability of common stocks as investments for American Life Companies has been again under considerable discussion. The issues now being raised with reference to investment policy regarding common stocks are the result both of new facts and relatively new ideas. The investment practices followed since 1930 have, coupled with declining long-term rates, reduced almost to the vanishing point the margin of net investment earnings above the rate of return needed to maintain policy reserves. The amount of personal savings now being channelled through life companies has increased to such proportions that it will be exceedingly difficult to find sufficiently large traditional life insurance investment outlets to absorb these huge funds.

How acute is the investment problem of life companies? To some experts, the dimensions of the present investment problem confronting life companies appear to be staggering. They think that investment officers already find it difficult to find outlets for around $1.0 billion to $2.0 billion of the total amount they now have to invest annually. To other observers, who think that the "era" of easy long-term money rates is over, it appears the present investment problem is not at all acute. They think that the conditions of the 20's will soon reappear and that relatively soon private debt investment outlets will be more than adequate to absorb all life insurance funds.

To judge the suitability of common stocks as investments for life companies under existing circumstances, let us then (1) review briefly the investment practices followed since 1930, (2) set forth in some detail the dimensions of the post-war investment problem and, in full view of this background (3) consider the suitability of common stocks as an additional outlet for policy reserve funds.

* The substance of this article was presented in two lectures at the Life Officers Investment Seminar at Lake Geneva, Wisconsin, in June, 1948. However, the Life Officers Investment Seminar and its sponsor, the Financial Section of the American Life Convention, are not necessarily in agreement with the statements made herein. In the preparation of this article I was exceptionally fortunate in having the constant and competent help of my assistant, Mr. Alfred H. Baume, Research Fellow in the School of Business.

### *II. Investment Practices, 1930-1945*

In contrast with the 20's, the investment officers of life companies in the 30's and early 40's were in a "tough" spot, to put it mildly. No sooner did the professors and politicians, in 1929, decide the American economy was stabilized and the capital markets were in excellent shape, when everything began to happen. And the adverse events followed one after another in rapid succession, coming close in the process of completely demoralizing the capital markets.

First came the drastic deflation of 1929-1932, and before it was over, about one-third of our then labor force was out of work. Along with it came a rapid rise in the long-term interest rate, hitting a level close to 7 per cent in 1932, compared to around 5 per cent in 1929. The value of mortgage loans, especially farm mortgages, as well as of coporate bonds, particularly medium grade bonds, declined significantly. At the same time, the cash demands of policy-holders was increasing at a rapid pace. The increase in policy loans alone was close to one-half of the increase in admitted assets between 1930 and 1931 for 49 of the largest life companies; and in the one year between 1931 and 1932 the increase in policy loans was about four-fifths of the increase in admitted assets of these companies.[1] Indeed, the solvency of some life companies, in spite of all the safety factors surrounding the operation of these institutions, was seriously threatened and a number of them shortly thereafter actually went under. This experience may well have developed the fear psychosis that many investment officers now display.

Then came the New Deal, with practically no sympathy at all for rentiers. Along with it came a drastic decline in the long-term interest rates. Farm mortgages, in the net, were either foreclosed or otherwise liquidated by life companies during the ten year period 1931 to 1940.[2] And other mortgages, in the net, were liquidated in the period of 1932 to 1936.[3] The cash demands of policy holders, however, abated; and by 1935 life companies began to be the recipients of an increasing proportion of annual personal savings. It is estimated that $1.5 billions of personal savings were

[1]Based on 49 companies holding 89.9 per cent of the admitted assets of all United States Legal Reserve Companies at the end of 1946. See *Proceedings of the Forty-first Annual Meeting of the Life Insurance Association of America* (New York), pp. 49-50. Where subsequent reference is made to *Proceedings*, the data refer to these 49 companies except where otherwise stated.

[2]*Ibid*, p. 48.

[3]*Ibid*, p. 48.

channelled through all life companies in 1935, the annual amount steadily increasing, except in 1937 and 1938, and reaching the level of almost $2.4 billions in 1941.[4] At the same time this was happening, the availability of new debt-security-issues was at no time more than $900 million in any one year during this period, in contrast to over $2 billion in each year between 1924 and 1930.

And then came World War II. Along with it the long-term interest rate continued to decline, hitting an all time low early in 1946 of well under 2.5 per cent. At the same time, personal savings were flowing in ever increasing amounts to life companies. Between 1941 and 1946 the amount so channelled increased annually from over $2.3 billions to about $3.2 billions.[5] As was to be expected, the greatest single investment outlet for these huge personal savings (even though channelled through life companies) was U. S. Government bonds. The investments in U. S. Government bonds between 1941 and 1945 were in excess, by a substantial amount, of the additions to admitted assets during this same period. State, county and municipal bonds, corporate bonds, farm mortgages and real estate holdings were in the net liquidated. Life companies came to the support of the war effort through purchase of U. S. Government bonds not only by investing all the new funds in these securities, but also by liquidating other investments and investing the proceeds in U. S. Government bonds.[6]

What were the results of the policies carried out by investment officers in the 30's and early 40's? Did they meet the cash demands of policy holders? Did they earn a rate of return on their assets above the rate at which policy reserves were being increased? Did they minimize the risk of capital losses? In short, did the investment officers of life companies adapt themselves to the ever-changing and fluctuating capital market during the period 1930 to 1945?

In full view of the exceptionally low visibility regarding the future during this confusing period [in which we experienced a violent deflation (1929-1932), a serious depression (1937-1938), a war (1941-1945)] coupled with an underlying low level of new investment, the irresistible off-hand answer is that the investment officers of life companies, within the restrictions put upon them by legislative bodies, did as well as could have been expected under the limiting circumstances. Relatively, the actual insolvencies were

[4] *Statistical Abstract of the United States*, 1947 (Washington: U. S. Government Printing Office), p. 419.

[5] *Ibid.*, p. 419.

[6] *Proceedings*, op. cit., pp. 48-50.

few in number, although avoided by the adoption of changed Convention Values for bonds and mortgage loans. The cash demands of policy holders were met, although restricted by the Moratorium in 1933. Even though the net earnings on admitted assets declined drastically, they still were above, although only slightly above, the reduced interest rate assumption on policy reserves. And the capital losses actually incurred, which were in many instances substantial, were ultimately absorbed. In short, the surface view of the investment practices between 1930 and 1945 indicates that the investment officers of life companies did fairly well in full view of the then difficult capital market conditions.

But let us get under the surface and analyze in somewhat more detail what happened during the twelve pear period, 1930-1941, when the capital market was undergoing rather serious short-run as well as long-run changes; and the five year period, 1941-1945, when the capital market was dominated almost entirely by Federal government fiscal policy aimed at carrying out the war effort. In order to interpret the investment practices of life companies during these two periods, however, it is advisable to have clearly before us a broad conception of the investment problems of life companies.

The late Lord Keynes, who was chairman of the National Mutual Life Company of England, once said the investment problems of a life company are solved if it earns a respectable interest rate well above the rate at which its policy reserves are increased and when it minimized the risk of serious capital losses. In arriving at this succinct statement of their investment problems, he, however, emphasized the thought that "capital depreciation is the great enemy of insurance companies" and in this connection he warned that only the short view should be taken in determining life insurance investment policies, because no one can foresee the future far ahead.

In general terms, then, what is the nature of the first problem confronting every investment officer, that is, of obtaining net investment earnings above the assumed rate of interest on policy reserves? Aside from the risk of capital losses, every life insurance company is subject to fluctuations in mortality rates, in expense rates and in interest rates. Assuming mortality and expense forecasting has attained a high degree of accuracy, the underlying problem regarding the rate of return on investments arises out of the tendency for debt securities of life companies to mature in advance of the payment of benefits on policy contracts, which are

determined in part by the guaranteed interest rates on policy reserves.

It is common knowledge that the debt securities of life companies on the average, particularly of expanding life companies, mature in advance of the disbursements for death and other benefits on their long-term life insurance policies. It follows that part, and often a substantial part, of the assets supporting already outstanding life insurance contracts with fixed interest rates regarding reserves will have to be invested at unknown future interest rates. If the new investments are made at yields which are higher than the assumed rate of interest at which the reserves of outstanding policies are being increased, then a gain will be made. If, however, the new investments are made at yields which are lower than the assumed rate of interest at which the reserves are being increased, then a loss will be incurred. In brief, it might be said, a life company tends always to be "long" the long-term interest rate. It will make gains if the long-term interest rate is rising and it will incur losses if the long-term interest rate is falling.

Even though the risk of a decline in the long-term interest rate was taken into account by basing premium calculations on an interest rate affording a margin of safety and additional margins of safety were made available by the mortality rate and loading assumptions, the decline in the rate of return on the investments during the 30's and early 40's was so drastic that by 1947 actual investment earnings were only slightly above those needed to maintain policy reserves.[7] The margin of safety was almost nil.

This situation arose primarily out of the fact that the additional funds accumulated by American life companies were invested during the period 1930-1941 primarily in exceptionally low-yielding government bonds. More than 58 per cent of new funds went into this field of investment. About 36 per cent went into the corporate bond field. The net reduction in mortgage loan investments was approximately offset by a corresponding increase in real estate. Only .7 of 1 per cent of new funds went into preferred and common stocks. And the rest of the additional funds augmented the cash held.[8]

In short, if one were permitted to consider all government bonds as riskless assets, over 63 per cent of the additions to admitted

[7] *Our National Debt and Life Insurance, National Debt Series No. 6* (New York: Committee on Public Debt Policy, March, 1948), p. 10.

[8] *Proceedings, op. cit.*, pp. 48-50.

assets during this eleven year period were kept in highly liquid form. The remainder, approximately 37 per cent after offsetting real estate acquisitions by reductions in mortgage loans, were invested almost entirely in corporate bonds. Risk investments were not popular. The drastic deflation experienced in 1929-1932 proved that the nemesis of life companies was the risk of capital depreciation.

This move toward liquidity, coupled with a decline in the long-term interest rate throughout this entire period, resulted in a drop in the rate of return earned on admitted assets of 49 life companies, from 5.03 per cent in 1930 to 3.39 per cent in 1941.[9]

In the process of adjusting themselves to the resulting drastic decline in net investment earnings, life companies had to resort to reducing dividend scales, and many companies increased premium rates on new policies. The amount of dividends to policy holders as a per cent of premium income dropped from 16 per cent in 1930 to about 10 per cent in 1941. And premium rates were increased substantially, well above 10 per cent.[10]

Under the surface, then, the investment policies pursued during the eleven year period 1930 to 1941 did not adequately solve the investment problem of earning a rate of return on investments well above the assumed rate of interest at which policy reserves were increased. Investment officers did not invest in the risk assets that might have improved investment earnings.

In this eleven year period, capital losses were also incurred, especially in the early 30's. Between 1929 and 1938 twenty-six companies reported a loss of over $870 million in real estate, bonds and stocks. In 1932 the loss in the bond holdings alone, however, was well over $1.0 billion.[11] As has already been observed, this experience, perhaps, goes a long way in explaining why investment officers put more than 58 per cent of the new life insurance funds in government bonds and increased their holdings of cash during the 1930-1941 period.

And now how about the war period, 1941-1945? In many respects, the investment policies carried out were a continuation of those followed after the drastic deflation of 1929-1932. Increased investments in government bonds and liquidation of other investments was the general practice, so that by the end of 1945 all life

[9] *Ibid.*, p. 46.

[10] *Our National Debt and Life Insurance, op. cit.*, p. 7.

[11] T.N.E.C., *Investigation of Concentration of Economic Power*, Part 10-A, *Life Insurance*, Washington, D. C., 1940.

companies had more than 50 per cent of their assets in government bonds, including U. S. Government bonds.[12] In the war period, however, as contrasted to the 1930-1941 period, this move toward more liquidity was "forced" upon the investment officers.

Under these circumstances, as was to be expected, the rate of net investment earnings of 49 life companies continued to decline, falling from 3.4 per cent in 1942 to 3.09 per cent in 1945.[13] Dividend payments to policy holders were further reduced, reaching a low level of under 9 per cent of premium income;[14] and premiums on new policies were further increased.

By the end of 1945, even though only 2.9 per cent was then required to maintain policy reserves, the margin of safety of net investment earnings over this interest requirement had fallen to 3.5 per cent. In short, the margin of safety had been reduced to insignificant proportions.[15]

It should be noted, however, that during this period many life companies had strengthened their surplus accounts. Capital gains were enjoyed, during this period, mainly arising out of the fact that corporations were willing to retire their outstanding debt by paying call prices above par, so that they could take advantage of the then low long-term interest rates.

Under the surface, therefore, the investment experience of life companies during the war period 1941-1945 was not entirely satisfactory. Life companies earned an interest return only slightly above the assumed rate of interest on policy reserves. The risk of capital losses was not increased primarily because the only significant new investments were made entirely in U. S. Government bonds. But it should be noted that even as late as 1942 important capital losses were actually taken by life companies, especially as a result of the liquidation of railroad bonds.[16]

To summarize, on the surface the investment officers since 1930 have done a fairly good job. In adjusting to exceptionally difficult capital market conditions, they have been earning a rate of interest above the assumed rate of interest on policy reserves and they have been minimizing the risk of capital losses. Under the surface, however, the investment practices followed since 1930

[12] *Proceedings, op. cit.*, pp. 48-50.
[13] *Ibid.*, p. 46.
[14] *Our National Debt and Life Insurance, op. cit.*
[15] See note 7.
[16] T. N. E. C., *op. cit.*

have reduced the net investment earnings to a level which barely covers the assumed rate of interest on policy reserves, did not avoid taking heavy capital losses, especially in mortgage loans and medium-grade bonds, and have turned life companies into large holders of what might be called "riskless" and low-yielding assets. Until the end of 1945, life investment officers have, in the main, increased the liquidity of their companies.

### *III. The Post-War Investment Problem*

At the end of 1945, in large part due to the investment practices (voluntarily as well as involuntarily) followed since 1930, the over-all investment problem of all life companies appeared to be as follows:

1. The need to convert a substantial portion of U. S. Government bond holdings, so that the margin of actual investment earnings above those needed to maintain policy reserves would be increased.
2. The need to find annually investment outlets for over $4 - $5 billion of new personal savings and other funds that were being channelled through life companies as a result of new life insurance business written, amortization, maturities and refunding.

By the end of 1947, a start had been made on this over-all problem, but only a start. The 49 life companies liquidated U. S. Government bonds as well as state, county and municipal bonds in the two-year period in the amount of over $578 millions. The principal investment outlets for these funds, as well as for the additional personal savings channelled through these 49 life companies, were corporate bonds and mortgages. These two outlets absorbed slightly more than the increase in admitted assets between 1945 and 1947.[17] It is worthy of note that additional investments were, also, made in preferred and common stocks. The net reduction in all government bonds was approximately offset by an increase in these non-traditional investment outlets. And real estate holdings, also, increased slightly.[18]

The over-all investment problem, however, still remained. Net investment earnings in 1946 dropped to 2.91 per cent for the 49 largest life companies,[19] compared to approximately 2.9 per cent

[17] *Proceedings, op. cit.*, pp. 48-50.
[18] *Ibid.*, pp. 48-50.
[19] *Ibid.*, p. 46.

required for policy reserves,[20] thus eliminating almost entirely the margin of safety.

All life companies held by the end of 1947 approximately $20 billions,[21] or about 39 per cent of their $51.7 billion of admitted assets, in U. S. Governments. Of this amount of U. S. Governments, well over $15.0 billion were invested in long-term Treasury 2½'s issued since December 31, 1941, and not callable for 15 years or over.[22]

The annual amount of personal savings channelled through life insurance companies was $3.2 billion in 1946 and almost the same amount in 1947, on the average considerably larger than they were even in the war years, 1941-1945. In addition, debt securities were maturing and being prepaid at the rate of over $1 billion per year.[23]

The long-run postwar investment problem, then, of all life companies as seen at the end of 1947, was twofold: (1) liquidating some $15 billions of long-term U. S. Governments and, (2) finding satisfactory investment outlets for around $4 - $5 billion additional funds every year, provided new life insurance business written does not go much above the high level reached in 1947. And if the present trend regarding new life insurance business written continues, this will, of course, not happen.

What are the present investment outlets for the personal savings being channelled through life companies? And can a substantial portion of the holdings of U. S. Governments be converted into higher yielding private debt securities?

Two views have been promoted regarding these problems of life companies: one pessimistic and one optimistic. The pessimistic view takes the position that, since the investment outlets suitable for the investment of policy reserves will continue to be limited, the major solution lies in the direction (1) of placing all policies on an even lower interest assumption than the one now being used, perhaps below 2 per cent, and of placing all policies on a participating basis so that in case of further difficulties premium rates can "automatically" be increased by reducing dividend scales, (2) of making term and group insurance more attractive to buyers than investment types of policies, so that per dollar of new life

[20] *Our National Debt and Life Insurance, op. cit.*, p. 10.

[21] *Ibid.*, p. 12.

[22] *Ibid.*, pp. 11-12.

[23] G. L. Harrison, *Some Observations on Equity Financing*, a speech delivered before the New York Chapter of the American Society of Chartered Life Underwriters, April 16, 1948.

insurance business a smaller amount will be added annually to reserve funds, and (3) of limiting the size of individual life companies, so that the problem of finding outlets is equalized among life companies.

The optimists argue that we are at the brink of the greatest industrial and agricultural development in the history of our country and, as a consequence, the investment outlets in the traditional fields will outrun any conceivable future increase in admitted assets of life companies. They think capital market conditions experienced during the 20's will be repeated. And further, the era of easy long-run money rates is over and, therefore, being "long" the long-term interest rate (as life companies are) will be in the net an advantage rather than a disadvantage, as it was during the 30's and early 40's. In other words, life companies will have no difficulty whatsoever in channelling personal savings and rearranging the composition of their assets so that they will again be (as they were in the 20's) heavy investors in mortgage loans and in corporate bonds. From this optimistic point of view, the investment problem of life companies will be as easy to solve as it was throughout the 20's, after World War I. Margins of safety between actual investment earnings compared to interest required for maintenance of policy reserves will be constantly increased and risk of capital losses will be insignificant.

To judge whether the pessimistic view or the optimistic view or neither is "correct" depends upon some sort of a quantification of the over-all investment problem. This in turn involves developing some idea regarding the postwar size of annual increases in reserve funds and the urgency of the need for liquidating the U. S. Government bond portfolio.

Personal savings being channelled through life companies in recent years, 1945-1947, have been running over $3.2 billions annually, compared to under $1.5 billion annually in the late 30's and less than $1.0 billion annually, on the average, in the 20's.[24]

In the nineteen-year period between 1929 and 1947 the admitted assets of all life companies increased by approximately $34 billion, or an average rate of approximately $2 billion per year.[25] During this period, however, all corporate new issues amounted only to $22 billion and less than half, approximately $10 billion, were debt issues, or at the rate of less than $.5 billion per year. At the same

[24] *Statistical Abstract of the United States*, 1947, *op. cit.*, p. 407.
[25] *Proceedings*, *op. cit.*, p. 50.

time, mortgage loans outstanding declined from $42 billion to under $40 billion.[26]

In contrast, during the nine-year period, 1920-1929, the admitted assets of all life companies increased by approximately $10 billion, or an average of $1.1 billion per year.[27] During this period all corporate new issues amounted to the stupendous sum of $37 billion and more than four-fifths, or over $31 billion, were debt issues. This is at an average rate of more than $3 billion per year. During the same period, mortgage loans outstanding increased from $22 billion to $42 billion, or at an average annual rate of around $2.0 billion.[28]

These data clearly show the most important single underlying reason why investment officers of life companies invested huge sums in government bonds since 1930. They also indicate, however, that if new private capital debt issues again reach the levels of the 20's, life companies may come close to finding investment outlets for reserve funds in private debt securities, provided they will be able and willing to buy practically all the new debt securities available in the capital markets.

Indeed, life insurance companies appeared to have done just this in 1947. Of the $4.1 billion in new security issues in 1947, of which bonds amounted to $2.8 billion, they purchased more than the equivalent amount of corporate bonds, over $3.0 billion.[29] With other financial institutions also seeking investments in private debt securities, this relative absorption by life companies probably cannot continue.

It is clear, then, even if the optimistic view is taken, that the outlet for life insurance reserve funds in new private debt securities, in relation to the existing level of personal savings being channelled through life companies, is decidedly limited.

But how about the problem of changing the present composition of investments so that a substantial portion of the U. S. Government bond holdings are converted into higher yielding private debt securities? Here again at least two points of view can be taken. One is that it will not be necessary to reduce the existing U. S. Government bond holdings by liquidation. It can be argued that the Federal debt will remain well over the $225 billion level for

[26] *Survey of Current Business*, September, 1947.

[27] *Proceedings, op. cit.*, p. 50.

[28] *Survey of Current Business, op. cit.*

[29] *Monthly Letter on Economic Conditions* (New York: National City Bank of New York) May, 1948, p. 56.

an indefinite period in the future, and under these circumstances, life companies may easily continue to hold close to one-tenth of this total. Indeed, they may be "forced" to do so because fiscal policy will be dedicated to keeping long-term interest rates at only slightly above the existing levels, and the difference in the yields of corporate bonds and mortgage loans, even if available, may not be sufficient to justify taking the added risk of capital loss as compared to investments in U. S. Government securities. The other view is that the long-term interest rate is definitely going up, as it did in the late 20's, and the current spree of additional government spending will subside. Under these circumstances, all life companies will probably want to sell between $5 to $10 billion of U. S. Governments over the next five years or so. But it is difficult to see what the investment outlet for these funds will be, unless investment officers of life companies break with tradition more than they have in the past and begin investing funds in equity situations on a relatively large scale.

The investment policies followed in 1946 and in 1947 show in miniature what life companies may have to do on a much larger scale hereafter. In this two-year period, the 49 largest life companies added over $5.7 billion to their admitted assets. They increased their corporate bond holdings by over $4.3 billion, their mortgage loans by about $1.5 billion, their preferred and common stocks by almost $.5 billion, and reduced their U. S. Government bond holdings by about the same amount.[30] Most of these changes occurred in 1947, when the increase in admitted assets for these 49 life companies was about $2.9 billion. During the twelve month period, their corporate bond holdings increased $2.6 billion, their mortgage loans $1.2 billion, their preferred and common stock holdings almost $.3 billion, and they reduced their U. S. Government bond holdings by $1.4 billion.

A general idea then, of the investment problem confronting all life companies in 1948 may be stated as follows: It is estimated the excess of income over disbursements will be $3.3 billion and, for reinvestment arising out of prepayments, maturities and refundings, it is estimated that an additional $1.3 billion will be available. In short, all life companies will be called on to invest new funds amounting to around $4.6 billion in 1948. Assuming that they will be again, as they were in 1947, able to invest in new corporate bonds and mortgage loans in the neighborhood of $4 billion, they will still have the problem of finding suitable in-

[30] *Proceedings, op. cit.*, pp. 48-50.

vestment outlets for $.6 billion. Let us say, real estate, collateral loans and policy loans absorb $.3 billion of this amount; they may then have the problem of investing in equity securities, such as preferred and common stocks, around $.3 billion.

But these estimates do not allow for any further liquidation of U. S. Governments. Should life companies want to disinvest U. S. Government bonds to the extent of around $1 billion per year over the next ten years or so, the ultimate pressure toward seeking an outlet in the equity field on a relatively large scale may become almost irresistible, unless all life companies are willing to add huge amounts to their cash holdings and still further reduce net investment earnings on admitted assets.

To summarize, the current postwar investment problem of all life companies, as seen in terms of 1948, may be that of seeking outlets in fields other than the traditional fields of investment for around $.3 billion. The long-run postwar investment problem may be that of seeking non-traditional investments for around $1.0 to $2.0 billion per year over the next ten years or so. Under these circumstances, it is obvious that the suitability of common stocks as an investment outlet must be carefully reconsidered. The present trend of drastically declining net earnings on admitted assets, with the resulting increased net costs to policy holders, is likely to continue, unless long-term interest rates will rise rapidly. Then, of course, the gains arising out of being "long" the long-term interest rate may be large enough to develop a margin of safety in this area. With the Federal debt well above the $200 billion level, however, a significant rise in long-term interest rates is not at all probable. The suitability of common stocks as investments for life companies thus becomes a practical problem, and not only the academic problem of whether or not life insurance investment operations should be carried out in a way that will broaden equity markets and thus help stabilize our American economy at a high employment level.*

*The concluding installment of this article will be published in a forthcoming issue of this journal.

# RISK FACTORS IN PUBLIC UTILITY SECURITIES*

*By* ORSON HART

*Research Associate, Joint Investment Research Committee*
*Life Insurance Association of America and American*
*Life Convention*

Risk factors in electric utility securities — what are they and how can they be measured? Here the economic environment is essentially different from that of the typical enterprise doing business in the United States today. In the electric utility field technological change is slow, the output is highly essential and the demand is widely diversified among different segments of the economy. There is virtually no inventory risk, no bad debt risk. Perhaps most significant, furthermore, the electric utilities are natural monopolies, but their rate structures are substantially below the level that would generate monopoly profits. This puts them in a position where an increase in rates would almost always produce an increase in pre-tax net, a luxury which competitive enterprise enjoys only in periods of prolonged shortages of goods and services.

The electric utilities are indeed well fortified against the usual risks of doing business. They are, however, vulnerable to the impact of regulation and to the continuing threat of Government subsidized competition. The latter of those risks cannot be adequately discussed in a paper as short as this, and comment will be limited to certain aspects of Government enterprise as compared with private enterprise. Most of this paper will be devoted to investment questions growing directly or indirectly out of the rate setting process.

Specifically, will rates be set high enough to justify investor confidence in the earning power of the industry? Are the electric utilities going to be able to finance their vast construction program without impairing their presently conservative capital structures? What are the relative risks of senior and junior investment in the utilities over the next few years?

The discussion which follows takes up these subjects, in order: the outlook for earnings, the construction program, the relative risks of senior and junior investment, and certain long-term implications of Government subsidized competition.

*This article is based upon lectures given on June 23-24, 1948 at the Life Officers Investment Seminar, sponsored by the Financial Section of the American Life Convention, at Lake Geneva, Wisconsin. The opinions expressed herein are not necessarily the opinions of the Joint Investment Research Committee or the staff thereof, or of the Life Officers Investment Seminar or the American Life Convention.

### *The Trend of Operating Revenues and Operating Revenue Deductions*

During the last ten years operating revenue deductions (all expenses including taxes and depreciation) have been increasing at a faster pace than operating revenues. Taking 1937 as the base year = 100, electric utility revenues (Class A and B privately-owned electric operating utilities) have increased from 100 in 1937 to 171 in 1947, while revenue deductions have increased from 100 to 202. By June 30, 1948, revenues were up to 181, but revenue deductions had reached 218. Stated in another way, security holders have been assuming a growing expense burden in relation to the return received. In 1937 it was possible to earn 33 cents by incurring 67 cents of operating expenses, whereas in 1947 it was necessary to incur 80 cents of expenses in order to earn 20 cents of return.

Now, of course, a bondholder sits in a much more secure position than either a preferred or common stockholder in respect to these trends. The bondholder gets his interest before the Federal Government has a claim for income taxes, and in a pinch he probably would come ahead of depreciation also. If revenue deductions are adjusted by eliminating federal income taxes and depreciation, then operating expenses have increased from 100 in 1937 to 185 in 1947 as compared with an increase in revenues from 100 to 171. It must be remembered, too, that most electric companies have supplementary sources of income which sweeten up the picture. All this notwithstanding, however, why should trends like these materialize at all when record profits are being earned in other industries?

There are two answers to this question. The first is that all business is having a hard struggle keeping ahead of the expense parade. The profits have been enormous, it is true, but primarily because the volume of trade has been enormous. The second answer is that the utilities, unlike competitive enterprise, have been compelled to maintain rates at close to the prewar level while taxes and the prices which enter into the cost of production have risen far above prewar levels. A huge economic squeeze play is in process.

The trends are disturbing. But there are fundamental reasons for expecting them to be reversed. In the first place, rate increases are almost certain to be granted to a significant segment of the industry during the next few years. The price advances that

have occurred in other parts of the economy, the large gains in earnings achieved by non-regulated industry and the tremendous expansion program of the utilities all point in that direction. The expansion program is especially important because it emphasizes the dependence of the utilities upon investor good-will. It is worth remembering that the utilities were not seeking outside capital while rates were being cut during the 1930's and the early 1940's. Bearing in mind the not inconsiderable demand for capital on the part of industries whose earnings are several times as large as before the war, it is hard to see how the case for rate increases in the electric utilities can be denied. Several increases have been granted recently, and a considerable volume of increases for other companies will soon be effectuated.

In the second place, the time is not too far distant when the prices of the principal elements entering into the cost of production will stabilize. There are, of course, many areas of the economy where demand, at current prices, still exceeds by a considerable margin the volume of output likely to be achieved for some time to come. In such areas wages can be increased and passed on to consumers in the form of higher prices and it is only common sense to expect this to happen. But those areas are becoming smaller. Each price increase, each gain in output, reduces the gap here, eliminates it there. It is worth noting that the first round of wage increases was at a higher per cent than the second, and the second at a higher per cent than the present round.

The utilities themselves no longer face the task of increasing their labor forces, as apparently some other industries do. Even coal, the great industrial essential, is probably peaking out price-wise, for the export burden is diminishing as mining activity is resumed in Europe. Depreciation charges, of course, will go up as new high cost plant goes on the books, but it is possible to utilize plant today at a much higher ratio than before the war. We may see some increase in the ratio of depreciation charges to gross revenue, but it will not be a substantial increase. State and local taxes also will increase and there is disturbing talk of raising the federal corporate income tax rate. All in all, however, the rate of increase in electric revenue deductions will assume much more modest proportions during the next three or four years.

The increase may be surprisingly small in the aggregate. If wages and prices do stabilize at or near the present level, then such increases as come about through increased fuel consumption,

increased taxes, and increased depreciation allowances will be minimized by the greater efficiency of new capital equipment. This is the third reason for expecting a better relationship between revenues and revenue deductions. Savings of perhaps 10 per cent may be involved for the average company, although estimates as high as 30 per cent have been made by some utilities. If the price of coal stabilizes one should look for little increase in the fuel bill over the next four years, and if the growth in sales comes to a halt the fuel bill will very likely decline.

Of course, I may be too optimistic about the prospects for early wage-price stabilization. In that event the burden will fall on rate increases, which will come faster and in greater amounts than would otherwise be necessary.

### *The Construction Programs*

As presently outlined the construction program involves the installation of 15,000,000 kilowatts of generating capacity, together with necessary supporting equipment, over the next four years. On the face of it a program of this size would increase the private companies' generating capacity by about 35 per cent. However, this calculation makes no allowance for the retirement of worn and obsolete equipment. Retirements, of course, can be deferred if the equipment is needed, but there comes a day when equipment not retired on schedule, so to speak, wears out completely. The utility industry is in no such condition today, but the time is coming when retirements will have to be stepped up considerably. It is estimated that the annual average retirements of equipment for the entire industry for the years 1935 to 1939 were 150,000 kilowatts of generating capacity, and that for the years 1940 to 1947 such retirements accounted for 275,000 kilowatts of capacity per year.

These estimates have been computed essentially by adding new installations to the preceding year-end figure and deducting the current year-end figure. There are a few defects; for example, the additions do not come from the same source as the year-end figures, and they probably are not complete. But they do give a fairly good idea of the rate of retirements over the last fifteen years. Making due allowance for the rough nature of the data available, it looks as though between three million and six million kilowatts have been retired since 1934. At that time the Federal Power Commission estimated that approximately 18 million kilowatts of generating capacity owned principally by the private com-

panies had been installed prior to 1926. Hence, if we assume that these retirements have all been in the pre-1926 class we have an estimate of from 12 million to 15 million kilowatts now in service which antedate 1927.

It has been said that a generating unit has a normal life of 20 years. It must be remembered, too, that equipment has been subjected to exceptionally hard and prolonged use during the last seven years. For these reasons one should have some reservations about the adequacy of the program, which apparently contemplates only nominal retirement of plant for several years ahead. Thus, it is not unlikely that construction will have to be continued at a high rate beyond 1951 even if kilowatt-hour sales level off at that time.

The chances are that kilowatt-hour sales will not level off, however, unless the country is thrown into a depression. Over the long run, economic activity grows at about a 2/3 per cent average annual rate in the United States, and the rate usually is higher following major wars. Industries such as the utilities which must furnish whatever volume of output is required certainly should be prepared for a growth rate of at least 6 or 7 per cent annually. Such a growth rate would raise annual electric power sales from the present level of approximately 220 billion kilowatt hours to 300 billion kilowatt hours in five years. Even if the utilization rate were maintained at the present exceptional level an additional load of such proportions would require close to 18 million kilowatts of generating capacity.[1]

Be that as it may, this is the program which the electric utility industry is undertaking and which spokesmen say will cost $6 billion. Some utility men think the figure is too high, and this may well prove to be the case provided the program does not exceed 15 million kilowatts. At any rate, let us accept the $6 billion estimate as a starting point. How can a program of such size be financed?

The industry has in mind generating $2.1 billions internally and raising $3.9 billions from the sale of securities to the investing public. Just how this money will be obtained depends of course upon the receptivity of the markets at the time funds are needed,

[1]Some experts wonder how long the utilization rate can be maintained at the present level. Quite a bit of industry is on a two-shift basis, but might be expected to go on a one-shift basis as soon as adequate facilities are available to accommodate all the workers at once. This would mean vast increases in capacity requirements. On the other hand, scientific load building, more intensive inter-connection, etc., should keep the rate well above prewar.

but the statistics suggest that there will be little difficulty in raising $3.9 billions over a period of four years. Even if the entire amount were raised from the sale of bonds and debentures, the debt ratio would be under 57 per cent for the average utility. However, as can be seen, the key to the problem is the accuracy of the $6 billion estimate, because, as the cost of the program increases, the pressure on the equity markets and on earnings both increase at a rapid rate, and it is the equity market especially that is giving investment bankers concern today. For example, if the 15 million kilowatt program cost $7 billions, then $4.9 billions instead of $3.9 billions would have to come from the capital markets and it would become more important to pick up some equity money; or failing this there would be need for a larger volume of internal generation of funds. An $8 billion program (for the same amount of kilowatts), calling for $5.9 billion of funds from the capital markets, would undoubtedly distort many capital structures unless a large amount of equity financing was undertaken.

At any rate, as things are now shaping up, bond and debenture financing by the electric utilities will exceed $1 billion this year and possibly next year as well. A much lower level of bond and debenture financing will occur in 1950 if the construction program ends with 15 million kilowatts. If, as sems to be the case, 15 million kilowatts is not enough, there will be a high level of financing for several years to come.

What will the capital structure of the electric utility industry look like when the present program is consummated? Arithmetic may cast some light on this question. The table below shows the December 31, 1947 combined capitalizations of the Class A and B privately-owned electric utilities, the industry's estimate of the source of capital funds for the construction program, and the resulting capital structure on completion of the program.

TABLE 1
PROJECTED CAPITAL STRUCTURE OF ELECTRIC UTILITY INDUSTRY

| | 1947 *Composite Capital Structure* | | *Capital Additions** | *Composite Capital Structure Projected* | |
|---|---|---|---|---|---|
| Debt | $ 6,601,428,000 | 46.7% | $2,200,000,000 | $ 8,801,428,000 | 47.5% |
| Pref. Stock | 2,121,716,000 | 15.0% | 1,100,000,000 | 3,221,716,000 | 17.4% |
| Common Stock | 4,101,944,000 | 29.1% | 600,000,000 | 4,701,944,000 | 25.4% |
| Surplus | 1,292,073,000 | 9.2% | 500,000,000 | 1,792,073,000 | 9.7% |
| Total | $14,117,161,000 | 100.0% | $4,400,000,000 | $18,517,161,000 | 100.0% |

* Estimates of Charles Oakes, President of Edison Electric Institute. See *Commercial and Financial Chronicle*, June 10, 1948, p. 28.

And so we have this tentative picture: At least $2 billions of electric utility bond and debenture issues over the next two years, with some possibility of further heavy financing for several years thereafter; comparatively little risk of a debt distorted capital structure for the average electric utility; but a need, nevertheless, to follow the cost of the financing closely, with special attention to the consequences of an outlay in excess of $6 billions for 15,000,000 kilowatts.

### *The Risks of Obligations versus Stocks*

Let us turn now to the matter of bond and stock investment in the utility field from the standpoint of relative risk under the circumstances which seem likely to prevail over the next several years. We have already noted two of these circumstances: the strong probability that the electric utilities will be seeking large amounts of money, principally fixed interest money, from the capital markets, and that earnings probably will be permitted to rise to induce investors to buy the necessary securities. There is also another circumstance, of broader gauge, that should be kept in mind. This is the growing authority of the Federal Government to regulate the money markets, and the variety of objectives such regulation strives to achieve. Efforts have been made on an increasing scale during the last fifteen years to stimulate capital formation, employment, and consumption; and more recently to discourage capital formation, restrain prices and discourage consumption. This is not the place to discuss money rate policy, but it must be observed nevertheless that regardless of the broad economic circumstances confronting us there always seems to be a compelling reason why the monetary authorities should keep the interest rate below the level which market forces otherwise would establish.

Investment objectives include both security of principal and security of return. It must be conceded, of course, that there is greater security of principal in utility bonds than in utility stocks. This is inherent in the nature of the securities, and unless runaway inflation befalls the country there is no prospect for a turnabout in this fundamental relationship.

In respect to security of return, however, a somewhat different situation has developed. In the table below is shown the course of interest payments and preferred and common dividend payments by the electric utilities for the years 1938 to 1947. The interest payments and preferred dividend payments have been adjusted

for changes in the average amount of capital outstanding. No adjustment has been made in common dividend payments. The figures are index numbers based on 1938 as 100.

TABLE 2
INTEREST AND DIVIDEND PAYMENTS BY ELECTRIC UTILITY INDUSTRY, 1938-47

| | *Preferred Stock** | *Long Term Debt** | *Common Stock* |
|---|---|---|---|
| 1938 | 100.0 | 100.0 | 100.0 |
| 1939 | 102.4 | 96.6 | 108.5 |
| 1940 | 102.6 | 93.9 | 109.8 |
| 1941 | 104.6 | 91.0 | 105.1 |
| 1942 | 104.1 | 89.5 | 94.7 |
| 1943 | 99.8 | 89.3 | 96.9 |
| 1944 | 93.5 | 86.8 | 95.2 |
| 1945 | 91.2 | 82.0 | 100.0 |
| 1946 | 88.1 | 76.1 | 119.7 |
| 1947 | 80.4 | 73.7 | 127.0 |

*Adjusted for amount outstanding; figures are based on 1938 as 100.

As can be seen, interest payments have declined substantially even though they are contractually fixed and might therefore be presumed to remain constant. Up to last year, all the bondholder could be sure of was that he would get the next payment if his investment were not called for retirement in the meantime. Despite the contractual nature of his claim and the fundamentally sound condition of the industry he could not look forward to any particular return a year or two hence. The common stockholder was in the same fix, but whereas in his case a decline in one year might be followed by an increase the next, the bondholder could hope for nothing better than his present coupon, regardless of the course of interest rates, until his investment matured. This was a period when there was perhaps too much security of principal in utility bond investments, and too little security of return in the real sense of the word.

The same observations hold true of utility preferred stocks. But since there is no maturity date, and generally no sinking fund attached to such securities, the decline in dividend payments is not simply for a long time, but possibly forever. Moreover, an upward turn in the interest rate would merely complete the debacle. Principal could not be recovered thereafter until the interest rate declined again, and even then recovery might not be possible if the outlook in the equity markets were unfavorable.

The common stockholder's dividend return has increased somewhat since 1938, but there have been some good-sized ups and downs. In 1942 there was a 10 per cent drop and in 1945 a 19 per cent increase. Although there is no security of principal in the

contractual sense, the stockholder has had the benefit of a steady accrual to surplus from retained earnings. The condition has contributed to security of principal and has bettered the chances of gaining an increasing dividend.

The period which produced such impairment of the bondholder's and the preferred stockholder's return seems to have come to a close for the time being. This should mean a saner situation in which bonds give the most security from all standpoints and common stocks the least; but it is hard to tell how long such a situation will last. The present heavy demand for capital by virtually all lines of industry already shows signs of tapering off, but in view of the size of the public debt we must be prepared to have the monetary authorities with us for many years to come. This leads to the thought that the next several years, while capital requirements are relatively high, will be a kind of interlude during which the interest rate will rise somewhat regardless of efforts by the Treasury or the Federal Reserve Board to control it in the furtherance of public debt management. In effect, it is a rest period during which investors can prepare themselves for the time when the interest rate will once again become highly susceptible to manipulation from Washington.

Such preparation doubtless will include some careful thinking in respect to protective indenture provisions. Two points in particular are already under investor scrutiny. The first is the call premium schedule. In recent years these schedules have been very close to issue prices. Since the call premium is deductible for tax purposes, issuing companies do not find this cost much of an obstacle to refunding when the interest rate declines. Stated in another way, investors are coming to feel that issuing companies can well afford to offer the protection of a higher call price schedule.

The second point has to do with cash sinking funds. Under the circumstances noted above cash sinking funds are useful to the lender principally because they enable him to take better advantage of any increase in interest rates that may occur. It has been argued that such funds are not appropriate for the utilities, on the grounds that what they seek is "permanent capital". Some have argued that the utilities would have to seek more capital than they needed to start with if they were obliged to pay part of it back in the form of sinking funds. These appear to be specious arguments. There is no reason why the utilities should not come back to the capital markets at frequent intervals as long as they

are operating in part with borrowed funds. Debt amortization is beneficial to both borrower and lender. Over the long run it will contribute to better credit for the former and better security for the latter. Being in continual need of funds, moreover, the utilities will be in a better position to insist that the welfare of their security holders be respected in the rate-setting process. From the standpoint of the lender a possible alternative would be serial maturities, but the principle of regular and orderly repayment is perhaps better observed by the sinking fund procedure. Outright principal amortization may be more satisfactory where the investor, or a group of investors, own the entire bond issue.

In respect to preferred stocks, there are well-known and fundamental shortcomings but, with adequate sinking fund and call premium provisions, those in the utility field can be fashioned into useful investment instruments. An irrevocable cash sinking fund has the effect of producing a maturity of sorts. A utility preferred stock thus fortified would be stripped of its most formidable objections and doubtless would yield more generously than a debenture or bond of like quality. Such issues will come with reluctance in the utility field, but the pressure for funds is great and the chances are good that a sizeable volume of well protected utility preferred will be offered during the next few years.

In the case of utility common stocks, there should soon be a turn for the better, and this improvement ought to be well under way in 1949. Looking to the longer range future, however, one must appraise the threat of Government subsidized competition, a subject that now calls for our brief attention.

### *Government Subsidized Competition*

Multiple purpose dams for most parts of the country are already in the blue print stage. From an investor's standpoint the danger is that as such developments are constructed there will be a move to connect them with high tension transmission lines, forming ultimately an inter-regional grid covering major sections of the country. The private utilities could not survive as oases in the midst of such a system. An exercise in arithmetic with the latest T.V.A. statement will show why this is so.

During the fiscal year ending June 30, 1947 the T.V.A.'s average capital investment amounted to $785 millions. This investment was provided entirely by the Federal Government or through the accumulation of retained earnings. The organization is not liable for Federal income taxes and pays virtually no interest on the

capital provided by the Federal Treasury. Our problem, therefore, is this: what would this enterprise look like if it were recast into a *privately-owned utility having a substantial equity position,* as such utilities must have?

The first step in such a recasting requires us to put in some equity money. Giving the enterprise the benefit of a high rating with a 50 per cent debt structure, its bond capital might cost it around 3 per cent and its equity capital perhaps an average of 7 per cent. On this basis the overall annual cost of capital would be about $39 millions, of which about $27 millions would be the annual cost of equity capital.

The second step is to insert a Federal income tax. This would amount to about $16.5 millions, so the pre-tax pre-interest net would amount to about $55 millions.

The third step is to estimate the overall subsidy. Programs other than power produced a net loss of $14 millions for the fiscal year ended June 30, 1947, while power operations netted $21 millions. Hence the project as a whole netted about $7 millions as compared with an estimated $55 millions, which would have been required had it been obliged to seek funds from the private capital markets and pay income taxes to the Federal Treasury. And so it looks as though the overall subsidy is about $48 millions a year.

The fourth step is to estimate how much of this is really assignable to power. Probably it all should be, since the other programs bring in no net revenue, but using the T.V.A.'s 60 per cent allocation we get an annual cost of capital of something over $33 millions for the electric operations. This compares with a maximum net of $21 millions and suggests that on a very minimum basis there is an annual subsidy of around $12 millions to electric users.

Now, $12 millions may not look like a great deal of money when one considers the size of the T.V.A. operation. Nevertheless, without this subsidy the T.V.A. would have had to charge $56 millions for power during its 1947 fiscal year instead of only $44 millions, and this would have required a rate increase of 27 per cent. Moreover, the T.V.A. under its present set-up *could* have charged only $37 millions — some 34 per cent below the competitive charge of a private company dependent upon capital from the open markets — *and still would have had left $14 millions of net income with which to subsidize other operations.* Could a private utility, surrounded by public power, withstand such a discrepancy

in rates for long? The odds are certainly against it. Consumers would insist upon a reduction to the Government level, and the Government would soon take over the properties.

The investor is posed with two questions by the multiple purpose dam. Are the private companies doomed over the long run, and if so what risks are involved from an investment standpoint? In answer to this, the cards are presently stacked against the private companies, but that does not spell doom.

Congress is not wedded to the multiple dam principle, nor to the inclusion of power therein. The world-wide spread of communism and police state methods of government is causing the American people to re-examine the virtues of free markets and private capitalism. Under such circumstances government enterprise is probably in for a Congressional going over during the next few years. The merits of combining flood control and electric power generation in a single venture and the economic wisdom of subsidizing the generation of power are two features of the multiple purpose dam that are sure to be scrutinized carefully in any investigation of this kind. Certainly the time is ripe for a test. The chances are it will come soon, and that it will produce a fundamental improvement in the outlook for private capitalism in the electric utility field.

Of course, the impact of subsidized competition differs with different classes of security holders. The risk can perhaps best be measured by comparing capitalization with net tangible assets at original cost. The T.V.A. paid somewhat more than original cost for the Commonwealth & Southern properties it took over before the war, and this is likely to set a precedent for Government policy. Judging from the way construction financing is shaping up now it will be a rare utility whose senior capitalization exceeds 75 per cent of net plant when the program is completed. Hence it is hard to see how bonds and debentures stand in any jeopardy from subsidized competition. Some preferred stocks may not fare too well, but the real risk is with junior equities. Here conflicting developments are at play. In recent years surplus has been augmented regularly by retained earnings, but this might not be the case if the utilities were obliged to combat subsidized competition. A fight for markets between public and private enterprise would consume the substance of the private companies. Tangible asset values might be largely destroyed in some instances.

Many who have an interest in the utilities as such will object to letting them fall victims to subsidized competition, or indeed to

having them Government-owned under any circumstances. In Government enterprise there is no check and balance, no real division of economic control. The electric utilities are admittedly a difficult segment of the economy to fit into a system of private capitalism and free markets. Some believe that it cannot be done successfully and that public ownership will have to be undertaken in the long run. There are many conflicting interests involved in this fundamental question of public policy. The common stockholder has much to gain from a perpetuation of the private enterprise principle in the utility field, but much to lose from a long drawn out struggle with subsidized competition. The next few years will probably establish the public ownership pattern for a generation or more to come. In the meantime it is a fortunate circumstance that the utilities have a large internal flow of funds — especially in the form of retained earnings — that frees them from heavy dependence upon outside sources of junior equity capital.

# BANK SUPERVISION AND THE BUSINESS CYCLE*

*By* VANCE L. SAILOR
*Chief, Division of Examination*
*Federal Deposit Insurance Corporation*

The inter-relationship between bank supervisory policies and the changing phases of the business cycle received no serious consideration until comparatively recent years. In retrospect, however, it is evident that the policies of bank supervisors have had a greater influence on the cyclical fluctuations of business than was previously recognized. Furthermore, the banking crises that universally accompanied the more severe dips in our business cycles have certainly had a great influence on the policies of bank supervisors.

Today, with our economy at or near a cyclical peak, it is well to stop and consider the extent to which bank supervision should concern itself with the vagaries of the business cycle. On the one hand there are those who feel that the examiner's duty ends when he has made an accurate evaluation of a given bank's ability to meet the demands of its depositors on a given date. At the other extreme there are those who seem to think that bank supervision is useful only as a tool in controlling the basic problem of inflationary or deflationary movements in the business cycle.

What is bank supervision anyway? How did it originate? What is its purpose? Does it have any direct or indirect influence on the business cycle? Or is bank supervision merely a parasitic growth that pursues banking like mistletoe pursues the grand old oaks of the South? Having worked in this field most of my adult life, I should like to try to answer at least a few of these questions.

## *Three Aspects of Bank Supervision*

A brief review of the history of our bank supervision will serve to show how and why it originated and how it developed. Bank supervision has three points of contact with our system of banking: (1) chartering; (2) examination; and (3) liquidation. The emphasis upon these different facets of supervision has changed markedly. Originally, supervision was exercised almost entirely through the granting or denying of charters. Gradually a system of examination was developed and, later, the exercise of control over liquidations became an important aspect of bank supervision.

*This article is based upon a lecture given by the author before the School of Banking at the University of Wisconsin in August, 1948. The School is sponsored by the Central States Conference.

The development of bank supervision reflected the efforts of the public to safeguard their monetary holdings. During most of the nineteenth century the objective was to protect the holders of bank notes against loss. Subsequently, as deposits became the major component of our money supply, the emphasis shifted to that of protection for depositors.

In view of these general objectives it is not strange that bank supervisory authorities held so long to their original concept that their sole responsibility was to assure the soundness of individual institutions. It was only much later that it became evident that the soundness of individual institutions is, in part, related to the soundness of the entire banking structure and the general economic situation.

Running through the history of bank supervision is a trend of progress in its basic philosophical aspects. In its beginning, supervision considered narrowly the rights and obligations of the individual bank and the chartering authority. Only after a long and tortuous history did bank supervision finally take into consideration the fate of the individual bank as related to more general economic considerations. Even with this enlargement in viewpoint, however, supervision must still function largely in terms of the individual bank and the community wherein it is situated, rather than in terms of the banking system and the national economy.

### *Bank Chartering*

Bank supervision had its origin in the prescription of the terms under which new banks could be established. The first banks in America, as in Europe, were private banks, and operated with little or no regulation. It was not until the establishment of public banks under legislative authorization that much attempt was made to regulate banking operations. This limited regulation, concerned primarily with specification of charter terms, is illustrated by the Bank of North America, incorporated in 1781 by the Continental Congress for the purpose of supplying credit to the young nation fighting for its independence. The First and Second Banks of the United States, which operated from 1791 to 1836, except for a lapse of five years, were likewise circumscribed by the terms of their charters. During this period, several States also chartered banks by special legislative acts. Gradually the system of special legislative chartering, which was both cumbersome and frequently subject to political influence, gave way to general bank chartering statutes. Following the lead of Michigan and New

York in 1837-38, several States passed "free banking" laws which automatically granted charters to all bank organizers who conformed to the minimum capital requirements and other specific provisions of the respective banking laws.

### *Bank Examination*

Under the terms of both the special charters and the "free banking" laws, the chartering authority reserved to itself the right of visitation and inspection of the books and records of the bank. Thus, the Bank of North America was subject to a quarterly inspection; and all the charters provided for more or less regular reports to be made to the chartering authority. These rights of visitation and reports were usually intended to make certain that the capital stock had been paid in specie, that public funds on deposit were secure, and that proper provision had been made for the redemption of circulating notes. Although the exercise of these rights and regulations were usually carried out in an indifferent manner, examination of banks made its bow at this time as an instrument in the enforcement of the terms of the respective bank charters.

The passage of the National Bank Act in 1863 finally established on a nationwide scale a uniform basis for chartering banks and for controlling their note issues. This Act provided a unit system of banking which embraced both the idea of competitive capitalism and the idea of a large measure of regulation by the Federal Government. Better enforcement machinery was provided by establishment of the Office of the Comptroller of the Currency, who was empowered to make regular examinations of national banks and report violations of law. As in the years preceding passage of the Act, however, examination continued to be regarded primarily as a policing function.

The National Bank Act set the pattern for most subsequently enacted State banking legislation. By 1914 all States had provided for some system of bank examination. However, the thoroughness and quality of examinations varied widely. At that time (1914) national bank examiners were still working on a fee basis, and there was very little coordination of the ideas and practices of individual examiners. The same lack of coordination of policies and practices existed among the various State examination systems and also among examiners within the States. Examinations usually followed a very simple routine, and were designed primarily to detect technical violations of law and occasionally, with luck, to pick

up an embezzler. The National Association of Supervisors of State Banks, formed in 1901, played an increasingly important role in promoting uniformity and clarification of examining standards among the different State authorities.

The passage of the Federal Reserve Act in 1913 brought a second Federal agency into the bank supervisory field. This law, as originally enacted, placed the responsibility for examining State member banks in the hands of the Comptroller of the Currency, apparently on the assumption that State member banks would be subject to most of the supervisory restrictions imposed upon National banks. This had the effect of discouraging State banks from joining the System; so in 1917 the law was amended to remove or moderate the provisions most objectionable to State banks. Among other things, the right to examine State member banks was transferred from the Comptroller of the Currency to the twelve Federal Reserve banks. It is important to note the use of the expression *right to examine* rather than *responsibility to examine.* Since there was no obligation to examine the State member banks, the Reserve banks generally accepted the reports of the State banking departments until about 1920.

By this time many of the member banks, both State and national, especially in the agricultural areas, were in a badly frozen and extended condition. The Reserve banks found it increasingly difficult to evaluate the quality of paper rediscounted for member banks on the basis of credit data supplied by the latter. So they gradually adopted the practice of making examinations in order to obtain first-hand information as to the eligibility of paper already rediscounted, or which might be offered for rediscount. From this beginning the Reserve bank examinations were gradually expanded until they became comparable in scope with those of other examining agencies.

Throughout the 1920's, however, the bank examiner was constantly faced with the danger of precipitating a run by taking any drastic action against a weak bank, and particularly a bank in a frozen or extended condition. It was only natural that bank examiners, with full approval of their higher-ups, should encourage banks to establish "secondary reserves" in the form of readily marketable corporate and municipal securities. Major emphasis was placed upon liquidity in the note case and marketability with respect to securities.

During this same period it became increasingly difficult for examiners to properly appraise loans, particularly real estate credits.

Generally speaking, farm mortgages and other agricultural credits were regarded as either slow or "capital" and came in for considerable pressure from the bank examiners. At the same time real estate developments were being carried out on a large scale in most of the urban centers, and while many of these developments were recognized as having hazardous potentialities, the booming economy in these urban communities, particularly those with a high level of industrial activity, made it extremely difficult for examiners to justify adverse classifications. When banks did fail, extreme pressure was exerted to reduce assets to cash in order to relieve the hardship on depositors, which naturally aggravated the depressive conditions already existing in the community.

### *Bank Examination Versus Bank Chartering*

Progressive improvement in examination standards by the various supervisory authorities was counter-balanced after 1900 by definite relaxation of the terms of bank chartering. This period was marked by competitive chartering between the State and Federal authorities. Following the banking crisis of 1907, the Comptroller of the Currency assumed, in 1909, discretionary authority in the chartering of National banks. He determined that banks should be capitalized in accordance with the volume of business they might be expected to attain, without regard to the minimum statutory capital requirements. Furthermore, he decided that the needs and convenience of the community should be taken into consideration, and that the proposed new bank should start out under reasonably safe management. This reaction of the Comptroller to the crisis of 1907 is an illustration of the fact that it is probably much easier to show that business cycles have an important effect upon supervision than to show that supervision can change the shape of the cycle.

The Comptroller, however, fought a losing battle with the State authorities. The number of State banks more than trebled between 1900 and 1913. The Federal Reserve Act liberalized the powers of National banks and imposed regulations upon State banks, which became members, more strict than those imposed by the State authorities. As a consequence, State banks were extremely reluctant to become members of the Federal Reserve System, and, in order to encourage them to do so, it was necessary to relax the restrictions. Similarly, the requirements imposed upon National banks were also relaxed. By 1921 we had about 30,000

banks. Most of the increase during the decade was in State chartered institutions.

As a result of failures the total number of banks in operation declined to 25,000 in 1929 despite continued activity in the chartering of new institutions. This was evidence of over-banking which had not corrected itself by the end of the decade. There is little doubt that a lack of coordinated thinking as between various groups of bank examiners and bank supervisors aggravated the depressing influences that led to the banking holiday of 1933.

*Control of Bank Liquidations*

The third aspect of bank supervision suggested above, namely, control of bank liquidations, was regarded until recent years as merely the eventual fate of banks that disdained to observe the sacred canons of banking statutes, or ran out of money at the wrong time. Prior to 1929, practically no attention was paid to the effect of a bank suspension upon the economic life of the community affected, or the relation of that event to the situation of the economy as a whole. Since bank suspensions ordinarily occurred in periods and places of unusual stress, it seems probable that such liquidations aggravated the deflationary phase of the cycle. The possible exception to this statement is the clearing-house associations, which frequently attempted to keep one or more of their member banks in operation in order to preserve economic stability within their communities.

There was a widespread effort on the part of supervisory authorities to prevent the closing of banks during the 1920's. However, this was done with little or no thought to the effect on the business cycle. Rather it reflected the unwillingness of most of the supervisory authorities to admit that their practices had been ineffective in the protection of depositors' funds. Resort was had to many expedients to avoid capital impairments or any showing of insolvency. To mention only a few, loss classifications were tempered to the available undivided profits for charge-off purposes. Assets of less questionable merit were classified as doubtful. Directors' guarantees were accepted in lieu of cash restoration of capital impairments. The net result was merely to accumulate trouble, which only added to the seriousness of the catastrophe when both bankers and bank supervisors finally had to "face up". Thus, the stagnation of business was aggravated by the concentration of bank closings which otherwise might have spread over a long period.

*Clearing House Associations*

Let us return to the reference to clearing houses and their attempts to preserve economic stability within their respective communities. The clearing house associations, while lacking the supervisory responsibilities of the Comptroller of the Currency, the Federal Reserve banks, or the separate State authorities, played an important role in the development of bank examination standards. The clearing house idea, originating in London in 1773, spread to this country shortly before the Civil War and rapidly took hold in several of the larger cities. The main purpose of clearing houses was to facilitate the collection of credits by cancellation of off-setting items of the various members of the association. However, certain clearing houses assumed in time the broader function of making independent bank examinations. What is more, it appears that the criteria presumed in these examinations went beyond the conventional purposes of examination then followed by the responsible examining authorities.

The Chicago Clearing House Association was the first to establish, in 1906, an independent system of bank examination; other cities followed. Writing of this development for the National Monetary Commission in 1910, Mr. James G. Cannon said:

> "Most bank failures are due to the gradual acquirement of undesirable assets over a period of years, and if some authority exists with power to make recommendations of a remedial character, with further power to enforce such recommendations, if necessary, there is little doubt that many bank failures would be averted."

Elaborating this theme in a book published six years later, in 1916, Mr. Jerome Thralls, Secretary of the Clearing House and National Bank Section of the American Bankers Association, wrote:

> "Federal and State bank examiners render most valuable service, but under the customs and laws they have little power that is of a remedial character. It is their duty to see that every bank they examine is conducted according to law; that its capital is unimpaired; that the books, records, and accounts are properly kept and that the reports made to the Comptroller or Banking Department are correct. They must confine their criticisms practically to infractions of the law, and offenders must reach the stage of capital impairment or insolvency before official action can be taken. At this

stage the remedy is an assessment against the shareholders, in some form or other, or forced liquidation. Bank examiners cannot prevent failures, but their visits and the police power with which they are clothed, are valuable influences in keeping banks in good condition. Some factor is needed, however, which will restrain, repair and correct minor irregularities, and unsound conditions, before they develop into the most dangerous stages. The Examination Department of the Clearing House is such a factor."

In spite of these quoted attempts to paint a distinctive contrast between the objectives and *modus operandi* of the supervision imposed upon these clearing house banks by law and their self-imposed supervision, the primary purpose was the same — namely, to police the activities of the individual bank with respect to its current liquidity and ability to convert non-liquid assets to cash. Certainly Mr. Thrall's statement that State and national bank examiners "must confine their criticisms practically to infractions of the law" *et cetera* is subject to challenge. Long before this statement was made, in 1916, the national bank examiners and the examiners of many States were doing a good job of preventive policing. Individual banks were being warned by individual examiners that they were following unwise banking practices, even though no violations of law might be involved.

These facts, however, do not disparage the worthwhile results of the clearing house examination system. A review of the history of bank examination activities performed by clearing house associations indicates that they should be credited with an important contribution in the philosophical development of bank supervision. The associations were composed of institutions operating in a community and banded together because of their recognized common interests. As a consequence, examinations conducted by them took into consideration the needs of the community, the dangers which might result if bankers engaged in lawful but economically undesirable types of business, and the desirability of policies which would avoid the destruction of values by forced liquidations.

### *Lessons of History Prior to* 1933

What does this survey of the history of bank supervision up to the time of the banking holiday of 1933 reveal in regard to its relation to the business cycle? Three points stand out clearly. In the first place, the free and easy chartering of banks which re-

sulted in an excessive number of banking units contributed materially to loose credit and investment policies, and the inevitable closing of uneconomic units helped to deepen the depression. Secondly, examination techniques were not only far from perfect, but also were lacking in coordination of activities among the various examining agencies. Furthermore, the appraisal of bank assets at realizable rather than ultimate values greatly distorted the actual economic situation. Finally, the liquidation of closed banks was pressed with considerable vigor at times when all values were depressed. The pinch thus put on borrowing customers, as well as the depressing effect exercised on the securities markets, merely accentuated an already critical condition.

Of all the supervisory activities that contributed to the banking crisis of the early thirties, perhaps the most pervasive was the adherence by supervisory and central banking authorities alike to the theory of self-liquidating loans and readily marketable investments. Whatever historical justification this theory may have had, it did not apply to our banking system as it actually functioned in the 20's and 30's. Prior to the banking crisis, supervisors and examiners evaluated assets on the basis of concepts revolving around self-liquidating commercial and agricultural loans, liquid open-market paper, and marketable securities. When these, as well as other assets, proved to be uncollectable in the early 30's, and banks were obliged to turn with equal futility to the central bank to meet deposit withdrawals, the whole pyramid erected upon this conceptual error came tumbling down.

### *Improvements Since 1933*

The first and basic step toward the development of realistic supervisory standards was the recognition that assets should be appraised on the basis of their intrinsic rather than their market value. Accordingly, banks were admitted to the newly established Temporary Deposit Insurance Fund on January 1, 1934, on a showing of bare solvency. Deposit insurance was provided to restore public confidence in the safety of bank deposits, and to that extent reduce the pressure on operating banks to liquidate sound assets on a depressed market in order to meet depositors' demands.

Once confidence was restored in the banks, the next step was to restore the health of the banks themselves. In order to accomplish this the inauguration of a permanent insurance plan was postponed to August 23, 1935, thereby giving operating banks a

longer period of time to get their houses in order. A tremendous amount of work was done in the way of strengthening bank capital, both from local sources and with the aid of the R.F.C. During this period examiners were cautioned not to exert undue pressure on banks to liquidate assets, but rather to condition them and assist borrowers to meet their obligations over the longer pull. Thus, effect was again given to the newer concept that intrinsic soundness rather than liquidity was the proper measure of asset values.

The competitive chartering of banks between State and Federal authorities, which had resulted in a surfeit of banking facilities during the 1920's, was likewise the subject of remedial action in the Banking Act of 1935. This Act required the Board of Directors of the Federal Deposit Insurance Corporation to take into consideration, in connection with the application of a non-member State bank for insurance, the following factors: the financial history and condition of the bank, the adequacy of its capital structure, its future earnings prospects, the general character of its management, and the convenience and needs of the community to be served by the bank. The Comptroller of the Currency and the Federal Reserve System were required to certify to the Federal Deposit Insurance Corporation that their member banks likewise met these conditions. The ability to prevent excessive chartering of new banks through this substantial addition to supervisory discretion has already shown encouraging results.

The process of bank liquidation, long neglected as an incidental but terminal event in the life cycle of individual banks, was converted by the Banking Act of 1935 from a haphazard operation, frequently conducted with little or no regard for the economic consequences to the community, to an orderly procedure. This Act provided that the Federal Deposit Insurance Corporation must be appointed receiver of all National banks, and could accept appointment as receiver of such State insured banks as might be tendered to it by the State banking authority. The Act also provided that whenever in the judgment of the Board of Directors of the Corporation such action would reduce the risk or avert a threatened loss to the Corporation, and would facilitate a merger or consolidation of an insured bank with another insured bank, the Corporation might make loans to, or purchase the assets from, the bank going into liquidation. In recent years this method of assistance has practically superseded the earlier technique of receivership, and has thus preserved banking facilities in many communities which might otherwise have been inconvenienced.

The Banking Act of 1935 also stipulated that in the liquidation of the assets of closed banks, the Corporation should realize upon such assets having due regard for the condition of credit in the locality. This was a corollary of the new emphasis upon soundness rather than liquidity as the basic criterion in the appraisal of assets. This provision was intended to protect the temporarily depressed community from having its situation further aggravated by the forced liquidation methods followed in previous years.

Thus, by the mid-thirties some of the weakest links in bank supervision had been substantially strengthened by specific statutory admonition. Over-chartering of banks had been reduced as well as irresponsible liquidation of the assets of closed banks. The third aspect of bank supervision, namely, bank examination, was not so specifically covered. However, the requirement that banks be admitted to the Temporary Insurance Fund on a basis of solvency without regard to the size of the capital margin implied that examiners should emphasize intrinsic value and ultimate collectibility rather than immediate liquidity. This statutory challenge to the traditional liquidity theory laid the foundation for a new philosophy of bank examination. No longer need preoccupation with liquidity accentuate the ups and downs of the business cycle. Examiners could now, with full professional aplomb, give more attention to the soundness of assets, and thereby avoid contributing to — if not actually moderate — the excesses of the cycle.

To carry out these new mandates, the bank supervisory agencies, both State and Federal, joined in a program to set up new standards and to obtain the maximum degree of uniformity of policies and practices. A series of conferences were held by representatives of the Federal supervisory agencies to develop the preliminary steps in such a program. The Executive Committee of the National Association of Supervisors of State Banks participated in all of the important conferences. As a result of these activities the three Federal agencies adopted a uniform examination report, which also was subsequently adopted by a majority of the State banking departments. This report was designed to bring about the objective named above, namely, to emphasize soundness rather than liquidity. The attainment of this objective was further aided by the adoption of the uniform basis for appraisal of security portfolios.

### *Summary and Conclusion*

The relationship of bank supervision to business fluctuations has been traced historically. The many changes that have been made

in both policies and practices to prevent bank supervision from aggravating business fluctuations have been discussed. The essential fact remains, however, that bank supervision cannot be an important instrument of monetary control. The major powers for alleviating business fluctuations are vested in the central banking authorities. Over-all credit control by these authorities and the fiscal operations of the United States Government are the major monetary forces which directly affect the level of business activity.

The chief function of bank supervision continues to be, as in the past, the policing of individual institutions so as to insure the soundness of our banking system. However, much progress has been made in the direction of coordinated activity among the various authorities, as well as in a broadening of the supervisory viewpoint. Sensible standards are being observed which effectively control over-chartering of banks without restricting healthful competition. Examination standards and practices have been greatly improved. No longer is a bank closed without regard for the economic welfare of the community.

The important objectives, equally desirable in both the boom and depression phases of the business cycle, include: detecting and eliminating self-dealing, establishing and requiring the maintenance of a certain minimum amount of owners' equity, establishing standards and quality of assets deemed to be suitable as bank investments, guarding against embezzlement and misapplication of funds, and promptly closing or reorganizing banks with large losses. In general, bank supervision should foster sound methods of bank operation, through the prompt writing off of known losses and the maintenance of appropriate reserves and valuation allowances to absorb anticipated losses, and through the employment of sound methods of credit analysis so that the best quality of available assets will be acquired first.

It should be kept in mind, however, that the attainment of these objectives on the part of bank supervisors presupposes that banks will not be subjected to abnormal pressures by a panic-stricken depositor public. In other words, loss of depositor confidence can wreck the best laid plans of the supervisors. The presence of Federal Deposit Insurance should tend to relieve banks from the severe strain of depositor pressure which has heretofore accompanied deflationary movements. Evidence to this effect is found in the record of the Corporation.

In its 14½-year period of deposit insurance ended June 30, 1948, 404 insured banks were closed because of financial difficulties in which financial aid was received from the Corporation.

These 404 banks, with total deposits of $512 million and 1,300,000 depositors, were liquidated or merged with the aid of advances from the Corporation. Ninety-eight per cent of the deposits were made available promptly without loss to depositors.

In many cases there was no interruption of the banking services in the communities; in others most of the depositors were paid in full within two weeks. Depositors' losses in the whole period have amounted to less than one-half of one per cent of the deposits in the closed banks. Such a record should contribute greatly to the confidence of bank depositors and give ever-increasing support to supervisory effort to foster and advance sound bank management.

The important lesson that bank supervisors should have learned from the recent past is the necessity of adopting a long-run viewpoint in their analysis and treatment of individual banks. Our supervisory and examination standards must be attuned to the economic realities. In a period of deflation it is disastrous to insist upon liquidity when the only result can be further contraction in our credit supply. At such time, judgment of individual credits must be based upon their intrinsic soundness with the realization that the depressed economic situation will not long continue. In periods of boom it is appropriate that the examiners probe more deeply in their credit analyses in order to eliminate as many as possible of the questionable credits which are likely to deteriorate rapidly when the boom subsides. The essential requirement is to take a long-run viewpoint both in good times and bad times and thereby avoid excesses of optimism or pessimism.

# VOTING RIGHTS OF PREFERRED STOCKHOLDERS IN INDUSTRIALS[1]

*By* JOSEPH F. BRADLEY
*The Pennsylvania State College*

Voting rights of preferred stockholders mean the privileges of the preferred stockholders to have a voice in selecting directors of the corporation and to cast their votes for or against proposed corporate policies which require the approval of these stockholders. In the absence of any special charter provision to the contrary, the preferred stockholders will have the same voting rights as common stockholders.[2] However, in each of the 250 industrial preferred issues reviewed the nature and extent of preferred stock voting rights were stated in detail. The voting rights of the preferred stockholders in these 250 industrial preferred issues were found to fall into three major classes, namely, (1) permanent voting, (2) temporary voting, and (3) consent voting. A preferred stock may have one or more classes of these voting rights. Some preferred issues contained all three types of voting rights. Each of the 250 issues examined had voting rights of some sort. It is therefore convenient to regard preferred stock as carrying with it a wide assortment of voting rights, the exact nature of which is determined by the corporate charter and the state incorporation laws.[3] The nature of permanent voting rights will be taken up first.

## *Permanent Voting*

Permanent voting rights give the preferred stockholders the perpetual right to participate, through the voting process, in corporate activities as designated in the charter. The right is perpetual in that it cannot be taken away from the preferred stockholders as long as the articles of incorporation remain unchanged. A preferred shareholder whose stock carries the permanent voting right may cast his vote either in person or by proxy. The preferred stockholder may exercise his permanent voting right on a wide range of matters on which stockholders vote, although the

[1]This article is an outgrowth of a Ph.D. thesis on *Protective Provisions in Industrial Preferred Stocks* prepared at the University of Pittsburgh. The study is based on 250 industrial preferred stocks issued during the period 1944-1946. The information was obtained from registration statements filed with the Securities and Exchange Commission by the issuing companies.

[2]See R. S. Stevens, *Handbook on the Law of Private Corporations*, West Publishing Co., 1936, pp. 449-56.

[3]The present State Constitution of Illinois, for example, prohibits the issuance of preferred stock which lacks permanent voting rights for the election of directors. See Article 11, Section 3.

most important use of this right is often considered to be the participation in the selection of directors. An illustration of a preferred issue carrying the permanent voting right is the Graham-Paige Motors Corporation 5 per cent Convertible Preferred Stock issued in 1945, which entitles each holder to one vote per share. The preferred stockholders in Graham-Paige Motors Corporation may vote on all matters on which the common is entitled to vote. On the other hand, the H. J. Heinz Company 3.65 per cent Cumulative Preferred Stock issued in 1946 lacks permanent voting rights. Of the 250 industrial preferred issues analyzed, 62 issues (25 per cent) granted permanent voting rights to the holders of the securities. The remaining 188 issues (75 per cent) lacked permanent voting rights.

Even though the charter grants permanent voting rights to preferred stockholders there is another factor which must be decided upon; that is, the technique or arrangement for putting the permanent voting right into use. The two possible methods of permitting preferred stockholders to express their permanent voting rights were found to be first, "share voting," and second, "class voting." If the permanent voting right is based on "share voting," it means that the preferred stockholders have one or more votes per share, which may be cast on all matters on which the preferred is entitled to vote. The distinguishing feature of share voting is that the preferred stockholders vote along with the common stockholders and a predetermined number of the combined votes carry the matter under consideration. Thus, if directors are to be elected the votes of the common stockholders are intermingled with the votes of the preferred stockholders. The previously cited issue of Graham-Paige Motors 5 per cent Convertible Preferred is an example of an issue with permanent voting rights based on share voting. Another example of permanent voting exercised through the medium of share voting may be found in the Standard Oil Company of Ohio 3¾ per cent Cumulative Preferred Stock issued in 1945, which grants preferred stockholders one vote per share. This voting right may be used at all meetings of stockholders. Still another example of this type of permanent voting right is to be found in the Trion Company 5 per cent Preferred Stock issued in 1944, which entitles preferred stockholders to permanent voting rights on the basis of two votes per share.

The second possible way of effectuating permanent voting was found to be the "class voting" arrangement. Under class voting a predetermined per cent of the votes within a class will carry the

proposal. The distinguishing feature of class voting is that the common stockholders' votes are not counted in with the votes of the preferred shareholders.[4] When permanent voting is based on class voting it means that the preferred stockholders as a class select a stated number of directors. An illustration of the use of class voting as a means of effectuating permanent voting rights of preferred stockholders is to be found in the Consolidated Grocers Corporation 5 per cent Cumulative Preferred Stock issued in 1945. This issue provides that the preferred stockholders as a class are entitled to elect one director. Share voting or class voting may exist under permanent voting, under temporary voting, and under consent voting, although at this point we are concerned with the application of the two methods to permanent voting. Of the 62 industrial preferred issues with permanent voting rights, 60 issues were based on share voting, while the remaining two were based on class voting. On the basis of these statistics it would seem as if industrial preferred stocks registered with the S.E.C. which grant permanent voting rights, use the share voting technique in the vast majority of cases.

The distinction between share voting and class voting has significance to the preferred shareholder because voting strength may be greater under one of the two methods. Under class voting the permanent voting strength is fixed because the preferred stockholders are allowed to select a stated number of directors. On the other hand, the voting strength of preferred stockholders is uncertain when permanent voting rights are based on share voting. For example, the Artkraft Manufacturing Corporation 6 per cent Cumulative Convertible Preferred Stock issued in 1945 carries the permanent voting right at the rate of one vote per share. However, on the basis of the number of common and preferred shares outstanding, the common stockholders could elect all the directors and carry all other matters on which the preferred would be entitled to vote, provided the common stockholders acted in concert.

[4]Stevens makes the following distinction between the two types of voting: "Where stockholders take action upon any question at a stockholders' meeting or otherwise, the determination is made either (1) by the shares voting or (2) by the classes voting. In the former case the preponderance of the votes cast by all classes of shareholders decides the question, the classes as such being disregarded in the count. In the latter, each class votes separately. If the required proportion of each class votes affirmatively, the proposal is won; if they vote negatively or disagree, it is lost. No account is taken of the totals of the affirmative and negative votes cast by all the classes combined." From W. H. S. Stevens, "Voting Rights of Capital Stock and Shareholders," *The Journal of Business of the University of Chicago*, Vol. 11, October, 1938, p. 312.

The exact voting strength of permanent voting preferred stock based on share voting is determined by three factors: first, the number of common shares outstanding in relation to the number of preferred shares outstanding; second, whether or not cumulative voting is granted to the holders of preferred shares; and third, the number of common and preferred shares voted at any meeting. Usually the number of outstanding shares of common is greater than the number of shares of outstanding preferred. This gives the holders of common an advantage over the preferred stockholders, although the advantage is not so great if preferred stockholders have cumulative voting rights. A third factor, the number of shares being voted, is also important. If large numbers of either common or preferred are not voted the outcome is unpredictable, depending on the number of common and preferred shares voted.

*Temporary Voting*

Temporary voting rights mean that upon the happening of certain events, or the failure of certain events to occur, the preferred stockholders are vested with designated voting rights, such voting rights continuing until the condition has been remedied which brought them into existence. Of the 250 industrial preferred issues reviewed, 220 (88 per cent) were found to contain temporary voting rights. The remaining 30 issues (12 per cent) lacked temporary voting rights. It should be noted, however, that the thirty issues which had no temporary voting rights already had permanent voting rights. An example of an industrial preferred issue which vests temporary voting rights in the holders of preferred stock upon the happening of a certain event is the Robert H. Graupner, Inc., 6 per cent Cumulative Preferred Stock issued in 1946. This preferred issue provides that the preferred stockholders can select a majority of the directors if the company's business of brewing ceases as a result of a revocation of licenses, which is not applicable to all brewers within the jurisdiction of the licensing authority taking the action.

Usually it is the failure of certain events to occur which causes the temporary voting rights to become effective. An example of an issue which vests temporary voting rights in the holders of preferred shares upon the failure of a certain event to occur is the Radio-Keith-Orpheum 6 per cent Preferred Stock issued in 1944, which grants the holders of preferred shares the right to select one-third of the board of directors if at any time the unpaid dividends on the preferred are $7.50 or more, such voting rights con-

tinuing until all back dividends on the preferred stock have been paid. Another industrial preferred issue which grants temporary voting rights upon the failure of an event to occur is the Julius Garfinckel and Co., Inc., 4½ per cent Convertible Preferred Stock issued in 1946. This issue provides that the preferred stock will carry one vote per share if (a) for any period of 120 consecutive days the ratio of current assets to current liabilities is less than one and one-half to one or (b) for any period of 120 consecutive days the total assets of the company, after deducting its total liabilities shall be less than 120 per cent of the par value of the outstanding preferred stock. In this study the main emphasis is on temporary voting rights which become effective upon the default of preferred stock dividends — the failure of an event to occur.

Corporate charters which grant temporary voting rights upon dividend default were usually found to provide three general phases or steps for the exercising of these voting rights. The first phase was the period of waiting. Dividends had to be in default a certain number of quarters before the temporary voting rights could be used. The practice occurring most often was found to be that which required the preferred stockholders to wait until the equivalent of four quarterly dividends were in arrears before the dormant temporary voting rights could be exercised. Other provisions of this nature are shown in Table I.

TABLE 1

NUMBER OF QUARTERLY DIVIDENDS PASSED BEFORE TEMPORARY VOTING RIGHTS CAN BE EXERCISED

220 Industrial Preferred Issues Which Have Temporary Voting Rights

| *Number of Quarterly Dividends Passed Before Temporary Voting Rights Can Be Exercised* | *Number of Issues* | *Per Cent of 220 Issues* |
|---|---|---|
| Under 4 | 1 | .5% |
| 4 | 105 | 47.5 |
| 5 | 4 | 2. |
| 6 | 97 | 44. |
| 7 | None | None |
| 8 | 11 | 5. |
| 9 and Over | 2 | 1. |
| Total | 220 | 100.% |

The second step in the vesting of temporary voting rights in the preferred stockholders usually requires that the holders of a certain per cent of the outstanding preferred stock must request a special stockholders' meeting for the purpose of exercising temporary voting rights. The Atlas Imperial Diesel Engine Company

4½ per cent Series A Cumulative Preferred Stock issued in 1946 provides that after dividends are in default for the equivalent of six or more quarters, the board of directors shall call a meeting of the preferred stockholders upon the written request of the holders of at least 10 per cent of the outstanding preferred shares. The purpose of the meeting is to apply the temporary voting rights of the preferred stockholders through the selection of one less than a majority of the directors. A similar set of provisions is contained in the Thalhimer Brothers, Incorporated, 3.65 per cent Cumulative Preferred Stock issued in 1946. This issue requires that the board of directors shall call a special stockholders' meeting if preferred dividends are in arrears to the extent of six quarters and provided the holders of at least 15 per cent of the outstanding preferred shares request such a meeting. The purpose of this special stockholders' meeting is to permit the preferred stockholders to select two directors.

The third aspect of the vesting of temporary voting rights in the preferred stockholders is that which requires that a certain per cent of the outstanding preferred shares be represented at the special stockholders' meeting before temporary voting rights can be applied. In other words, enough preferred shares must be represented to provide a quorum. The Industrial Rayon Corporation $4.50 Preferred Stock issued in 1944 requires that the holders of at least 25 per cent of the outstanding preferred shares must be represented at the special stockholders' meeting called for the purpose of allowing preferred stockholders to use their temporary voting rights. The Hinde and Dauch Paper Company $4.00 Cumulative Convertible Preferred Stock issued in 1945 requires that the holders of at least 35 per cent of the outstanding preferred shares must be represented at the special stockholders' meeting before the preferred stockholders can apply their temporary voting rights.

For the duration of the temporary voting period the preferred stockholders may participate in corporate affairs, through either share voting or class voting. Of the 250 industrial preferred issues reviewed, 220 were found to contain temporary voting rights, and of this number 197 issues (90 per cent) were found to be based on class voting, while the remaining 23 issues (10 per cent) were found to be based on share voting. If the temporary voting is on a share basis it means (as in permanent voting) that the preferred stockholders vote along with the common stockholders for the selection of directors and on all other matters

which need stockholder approval. A case illustrating temporary voting rights based on share voting is the Hunt Foods, Inc. 5 per cent Cumulative Preferred Stock issued in 1946, which provides that the holders of preferred stock become entitled to one vote per share in case dividends are in default for the equivalent of four or more quarters; the voting rights being divested when there are no unpaid dividends on the outstanding preferred stock. On the other hand, if the temporary voting is on a class basis it means (as in permanent voting) that the preferred stockholders, as a class, have the right to select a stated number of directors. For example, the Fruehauf Trailer Company 4 per cent Preferred Stock issued in 1946 provides that when the aggregate dividend arrearages on the preferred stock are equal to six or more quarterly dividends, the number of directors is to be increased by two; the holders of preferred shares as a class having the right to select the additional directors. Under class voting the board of directors may be increased as in the issue just mentioned, or the board of directors may not be increased as in the case of the Avon Allied Products, Inc., 4 per cent Preferred Stock issued in 1946, which grants the preferred stockholders the right to replace two directors if at any time preferred dividend arrearages amount to at least six quarterly dividends — such voting rights to exist until all accrued dividends on the preferred stock have been paid. Whether share voting or class voting is used for the duration of the temporary voting period has significance because of the factor of voting strength.[5] An example of an issue which grants temporary voting rights, but which lacks voting strength is the Nu-Enamel Corporation 60 cents Cumulative Preferred Stock issued in 1945. The holders of this preferred issue are allowed to exercise temporary voting rights on the basis of one vote per share if dividends are in default on their preferred stock to the extent of

[5]One of the factors affecting the amount of voting strength granted during the temporary voting period is the stock listing requirements on the New York Stock Exchange, assuming the intent is to list the security. For several years prior to 1940 the exchange had been refusing to list preferred shares not possessing the right to at least one vote per share after dividends were in default for a stated number of quarters. The Department of Stock List circular, from which this material was obtained, goes on to say that it had been observed that in most instances in which preferred stock received only one vote per share, the right was of small practical value because of the numerically superior voting power of the common stock. To strengthen the right of preferred stockholders to participate in the selection of directors after didivends are in default, the New York Stock Exchange did not list, after 1940, any preferred issue which does not give the preferred as a class the right to select two directors after the equivalent of six quarterly dividends are in arrears on the preferred. This material is adapted from a release of the New York Stock Exchange, Department of Stock List, *Statement of Listing Requirements As to Preferred Stock Voting Rights*, May 4, 1940.

four quarterly dividends, such voting rights to continue until all back dividends on the preferred stock have been paid. The Nu-Enamel Corporation has 50,000 shares of preferred stock outstanding, 325,000 shares of common stock outstanding, and a board of directors consisting of three members. Even if the 50,000 shares of outstanding preferred were voted as a bloc, the preferred stockholders could not select any directors if the common stockholders acted in concert.

If the preferred stockholders already have permanent voting rights they may be granted additional temporary voting rights upon the default of a specified number of quarterly dividends. Of the 250 industrial preferred issues reviewed, 62 had permanent voting rights; of these 62 issues, 32 contained provisions allowing additional temporary voting rights after dividends were in default for a specified number of quarters. The remaining 30 issues with permanent voting rights contained no provisions for granting additional temporary voting rights upon dividend default. An example of an issue which has permanent voting rights, and which also provides for temporary voting rights, is the Artkraft Manufacturing Corporation 6 per cent Cumulative Preferred Stock issued in 1945. Each share of this stock carries permanent voting rights at the rate of one vote per share. These votes may be cast on all matters requiring stockholder approval. In addition, if the Artkraft Manufacturing Company should at any time have dividend arrearages on the preferred stock equal to or greater than the sum of eight quarterly dividends, the preferred stockholders are granted temporary voting rights on the basis of five votes per share — such voting rights to continue until all back dividends have been paid. The five votes per share granted to these preferred stockholders is in lieu of one vote per share. Another issue, that of the Standard Brands, Incorporated, $3.50 Cumulative Preferred Stock issued in 1946 provides a similar example, except that in this case the temporary voting rights are on a class basis. The holders of this issue of Standard Brands have permanent voting rights on the basis of one vote per share. If Standard Brands defaults on preferred dividends to an extent equal to four quarterly dividends, the board of directors is increased by two and the preferred stockholders as a class may select the additional directors — the temporary voting rights to continue until all back dividends on the preferred have been paid.

Preferred stockholders hope they will never have to exercise temporary voting rights, because the very use of these voting

rights is a sign of financial distress of the corporation, of which the preferred stockholders are part owners. Preferred stockholders also hope that if they do have to use their temporary voting rights, such voting will not last for any long period of time, because the divestment of these rights is usually a sign that the corporation has paid accrued dividends on the preferred stock. The distinguishing characteristic of temporary voting rights is that while the corporation is in sound economic health the rights are dormant.

*Consent Voting Rights*

Consent voting rights exist when certain proposed actions of the board of directors must be approved by the preferred stockholders before the proposed action may be carried out. These voting rights suggest that corporate policies may not always be to the advantage of preferred stockholders. Since directors are usually representatives of common stockholders, the preferred stockholders must resort to contractual limitations on management. Preferred stockholders as a class may have to approve the issuance of bonds by the corporation, the removal of assets from the business, amendments to the charter, and mergers with other companies. In addition, the preferred stockholders may have to approve other proposed actions of the board of directors, such as increasing officers' salaries above a certain amount.

When the holders of preferred shares must give their approval to proposed actions of the board of directors, the voting is almost always on a class basis, that is, the votes of the common stockholders are not counted in with the votes of the preferred stockholders. The common stockholders may also have to approve the proposed action by the board of directors, but they approve or disapprove the action as a class.

When preferred stockholders as a class must approve a proposal there are two methods of allowing them to express their approval or disapproval. They are: (1) Positive consent voting, and (2) Implied consent voting.

Positive consent voting, the usual type of consent voting, means that a certain per cent of the outstanding preferred must be voted affirmatively on a proposed action by the corporation. If, for example, the outstanding preferred must approve the issue of additional securities, perhaps two-thirds of the outstanding preferred must be voted in favor of the issue. The preferred stockholders may express their wishes through either personal appearance or

proxy voting at the stockholders' meeting called to allow the preferred stockholders to vote on the proposed security issue. A typical case of positive consent voting is to be found in the Wilson and Co., Inc. $4.25 Cumulative Preferred Stock issued in 1945. This issue provides that at least two-thirds of the outstanding preferred must be voted affirmatively before Wilson and Co., Inc., may issue any stock ranking prior to the outstanding preferred. Another example of positive consent voting is to be found in the Twin Coach Company $1.50 Cumulative Convertible Preferred Stock issued in 1946. This issue provides that unless certain conditions exist at the time of the bond issue, 60 per cent of the outstanding preferred must approve a proposed bond issue.

Implied consent voting means that unless a certain number of the preferred shares are voted against a proposal, the preferred shareholders are assumed to give their consent to the proposed action by the corporation. The preferred shareholders who do not cast their votes against the proposal are presumed to give their consent by implication. If, for example, not more than 25 per cent of the preferred shares outstanding are voted against a proposed bond issue, the preferred shareholders are presumed to give their consent, as a class, to the new bond issue. An illustration of implied consent voting is to be found in the E. R. Squibb and Sons $4.00 Cumulative Preferred Stock issued in 1945. This issue provides that unless certain financial tests are passed the preferred stockholders as a class must give their consent to the proposed bond issue. Consent means that if not more than one-fourth of the preferred shares are voted against the proposal within thirty days after the mailing of the notice, the preferred stockholders are assumed to assent to the bond issue by implication. Another case of implied consent voting is to be found in the Reeves-Ely Convertible Preference Stock which provides that unless certain kinds of bonds are issued (such as a refunding issue) the consent of the outstanding preferred is necessary to validate the issue. Consent in this issue means that the Reeves-Ely Laboratories, Inc., must give written notice of the proposed security issue to the preferred stockholders and if the proposal is not disapproved within thirty days by the holders of a majority of the outstanding preferred stock, the preferred stockholders are presumed to give their consent to the placing of a lien on the assets.

Implied consent voting rights are an outgrowth of the problem created by the inertia of stockholders which may make it difficult for the corporation to get a proposed action approved. This is par-

ticularly true when a high per cent such as 75 per cent is the minimum of outstanding preferred shares which must approve the proposal by the directors. By placing the burden on the preferred stockholder to express his disapproval, management may simplify the process of getting an action approved by the preferred stockholders.

*Summary*

Voting rights of preferred stockholders fall into three classes, namely, (1) permanent voting rights, (2) temporary voting rights, and (3) consent voting rights. Under permanent voting rights the preferred stockholders have the right to participate in stockholders meetings to the extent stated in the charter. The usefulness of permanent voting rights depends to a large extent on the amount of voting strength granted the preferred stockholders. Temporary voting rights come into existence only when the corporation is unable to abide by certain promises made to the preferred stockholders. Typical situations leading to temporary voting are the passing of dividends on the preferred stock for a certain number of quarters and the inability of the corporation to set aside cash for a sinking fund on the preferred stock. Consent voting gives preferred stockholders veto power over certain proposed actions of the corporation.